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# LONG-RANGE PLANNING FRAMEWORK

## ADVANCE PLANNING PROGRAM

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# COMPONENT I

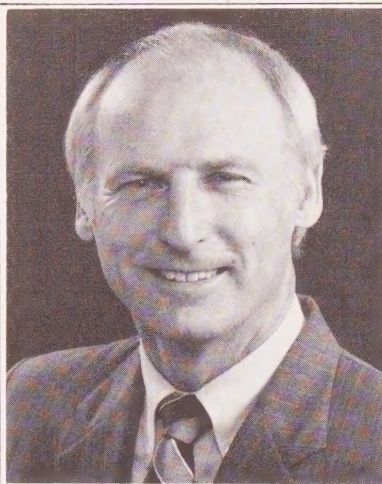


# COUNTY OF ORANGE

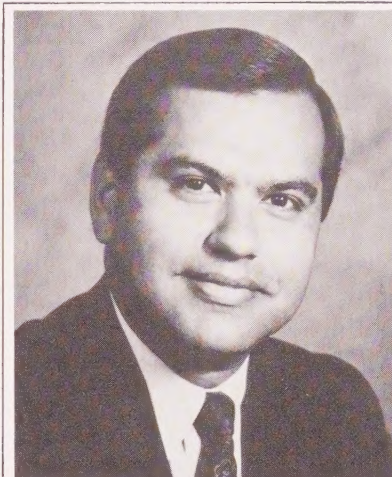
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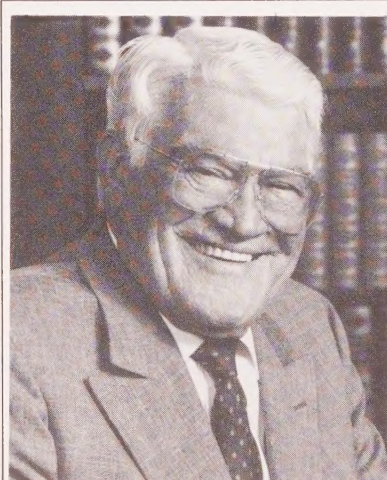


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COMPONENT I  
LONG-RANGE PLANNING FRAMEWORK

County of Orange  
Environmental Management Agency  
Advance Planning Division

November 13, 1985

Board of Supervisors Resolution  
No. 85-1620

|          |          |                |         |
|----------|----------|----------------|---------|
| REVISED: | 06/09/82 | RESOLUTION No. | 82-892  |
|          | 09/01/82 |                | 82-1333 |
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## CHAPTER ONE: THE ADVANCE PLANNING PROGRAM

### A. Overview

The Advance Planning Program is a description of the process by which advance planning decisions are made and implemented. Since the Environmental Management Agency (EMA) deals primarily with the physical environment, this planning program describes the process of making and implementing land plans, that is, planning for how land is to be used in the future. While the County has always had a planning program, the program has typically been defined solely by the plans themselves. The logical framework of the planning process and the relationships between plans are seldom clearly stated.

The EMA has several planning programs. The one discussed here is the process by which the General Plan elements described in Title 7 of the state Government Code are prepared and implemented by Orange County. This program does not describe the planning processes used by cities, special districts, the Southern California Association of Governments (SCAG), state, federal or other County agencies. These other programs may have as much or more impact on land planning, but they are based on different objectives and have different processes.

Assumptions: The projections for the Advance Planning Program are the set of social and economic assumptions and growth projections called Orange County Preferred. The most recent iteration, known as Orange County Preferred-1985 (OCP-85), was adopted by the Board of Supervisors on February 19, 1985. Since 1977, the Board of Supervisors has directed County agencies and districts to use the adopted growth projections for all planning programs. These projections have also been incorporated in regional, state and federal planning programs. By requiring planners to use the same assumptions and growth projections, the Board promotes consistency among plans.

With the exception of transportation planning, however, these assumptions and growth projections have not played a major role in planning decisions. By incorporating these projections into the Advance Planning Program, more consistent planning information will be available to decision makers.

All plans are based upon assumptions about growth patterns and the future social and economic character of the community. However, these assumptions are seldom stated in planning documents. Because plans are prepared, adopted, and implemented by different people, the opportunity for different social and economic assumptions to enter the planning process has been very great. When these assumptions conflict, the intentions of plans are not implemented or are not implemented in the manner they were intended. One of the major differences between the pre-GPM and post-GPM planning programs is the inclusion of social and economic assumptions and growth projections as objectives in the Advance Planning Program. By making these assumptions and projections explicit, the program will say less and mean it more. These assumptions and projections will ensure consistency among the components of the program by requiring that only one set of assumptions is included in all plans.



Needs, deficiencies and constraints: Another major difference between the pre-GPM and post-GPM planning programs is a greater emphasis on identifying future policy and public service needs, deficiencies and constraints. Based on the assumptions and growth projections noted above, the future housing, transportation, recreation, and other physical needs of the county can be projected. Obstacles to meeting these needs and resolving these deficiencies can then be identified, and the appropriate goals, objectives, policies and programs can be developed and implemented.

In summary, the Advance Planning Program will:

1. Identify social and economic assumptions and growth projections
2. Project needs and deficiencies
3. Identify constraints
4. Develop plans and programs

Time periods: The planning program has another key aspect: three different time periods for which planning is done. The plans which are prepared by the Advance Planning Division are used for many purposes. They are used in the short term (1-5 years) for reviewing projects such as tentative tract maps and site plans, and preparing short-range capital improvement programs. In mid-range planning (5-25 years) they are used for reviewing projects such as zone changes and feature plans, and preparing public works programs. In the long-range studies (25-50 years) they are consulted when evaluating public policy and planning major public projects.

In addition, needs, deficiencies and constraints may vary at different times in the future. For example, if the average number of school-age children per household were to change between 1985 and 2010, needs for school facilities would have to be reevaluated.

Finally, plans for short-term implementation require a narrower view of needs, deficiencies, and constraints than plans for mid-term or long-term implementation. A different scale of planning is needed for each period. A community scale is best for short-range plans, while the unincorporated area is better suited to a mid-range perspective. Countywide and regional issues are best handled in a long-range framework.

For these reasons, the Advance Planning Program is divided into three time periods, or components. Component I of the Program focuses on long-term issues, while the scope of Component II is mid-term planning. Component III is the most specific, dealing with short-term topics.

The following summarizes each of these components, how they are used in the planning process, how they relate to one another, and how they are implemented.

## B. Component I: Long-Range Planning Framework

Purpose: The purpose of Component I is to examine the long-range implications of policies and trends related to land use. Component I establishes a baseline from which long-range needs and alternatives may be identified and policies developed to protect future options. Proposed changes in long-range policies or trends can then be compared to this baseline information and conclusions drawn about the countywide impact of such changes, especially whether or not such actions preclude some future option. Typical changes in policy or trends would include broad change in:

- o Population characteristics (e.g., birthrate, household size)
- o Actions affecting public service capacities (e.g., Peripheral Canal, Proposition 13)
- o Technology (e.g., communications, transportation)
- o General Plan policy issues (e.g., agriculture, housing)

Component I will identify long-range needs for policies and public services so planning studies can be initiated and notice provided to the public, landowners, developers, and public agencies of such needs and alternatives to meet these needs.

Scope: The scope of Component I is countywide. The intent of Component I is not to regulate land use planning in either the incorporated or unincorporated areas of the county, but rather to examine broad trends and policies. In long-range planning, the unincorporated area is linked inextricably to the trends in the cities. Thus, the entire county must be considered.

The time period for this component of the program is forty to fifty years in the future. For the initial (February 1982) version, the year 2020 was chosen as the threshold year because of the large amount of data already available for that year. The level of development projected for that year may actually occur before or after that time. The intent, however, is to indicate growth levels that would result from the assumptions stated.

The County has not formally adopted any policies or projections of development for forty or fifty years in the future because the level of confidence in such policies or projections is relatively low. To increase the credibility of long-range planning, Component I includes a wide band or framework of possible future levels of population, housing and employment. For example, the county's population is projected to be between 2.6 million and 3.25 million in 2020. The likelihood of the 2020 population falling somewhere between those points is very high. Therefore, the level of confidence in planning which encompasses that range is also very high.

Long-range planning is proposed to focus initially (February 1982) on three alternative growth scenarios, that is, three sets of social and economic assumptions for 2020. As noted above, the low-growth and high-growth scenarios (Scenarios I and III) predict county populations of 2.6



and 3.25 million persons, respectively. The mid-range scenario (Scenario II) would result in 3.0 million persons. Detailed discussion of the scenarios is included in Chapter 2.

Relation to other planning: Component I has few, if any, counterparts in other planning programs in terms of its horizon year or approach. It does have an antecedent in the 1972 report, People, Policy and Growth, prepared by the County Planning Department.

The purpose of Component I is to identify and protect long-range options in land planning. The examples of failures to protect these options are too numerous and painful to repeat here. The need for a long-range planning framework is self-evident.

Component I will be strongly related to Component II of the program. The assumptions and growth projections of Component II are, and must be, compatible with Component I. Any change to the assumptions of one component must be reviewed against the assumptions of the other components to maintain compatibility. Changes to other portions of Component II must also be reviewed to ensure that amendments do not preclude identified options. For example, Land Use Element amendments should not eliminate a potential transportation corridor alignment whether or not that alignment is necessary for Component II levels of growth.

Implementation: Component I is not an element of the General Plan, nor is it even a plan. It is a framework within which studies and plans are prepared. Component I is implemented through Component II. In addition to Component II, other special studies or plans may be undertaken to clarify long-range needs or alternative courses of action.

Component I is also implemented by focusing debate about the future of Orange County. The three scenarios serve as baselines against which other projections or policy directions may be compared. Component I is intended to facilitate constructive discussion of the future, not serve as the final statement of long-range County policy.

Administration: In addition to this chapter on the Planning Program, Component I contains two chapters which elaborate the planning concepts of the long-range planning framework.

Chapter Two describes the three growth scenarios noted previously and summarizes their impacts, system-level demands and needs for policy. It is not intended that any single scenario be adopted as County policy. County policy as it relates to the scenarios is that no project should preclude the attainment of any of the growth projections, social and economic assumptions, or level of public services required to meet projected demand for any scenario. In making such determinations, greatest emphasis should be placed on the text of the scenarios. The maps are intended only for illustrative purposes. Changes to the scenarios will be processed by the Advance Planning Division, reviewed by the Planning Commission at a public meeting, and approved by the Board of Supervisors. Notice will be provided as for General Plan amendments prior to public meetings. A manual elaborating the administration of Component I will be prepared and maintained by the Advance Planning Division.



Chapter Three describes the goals of the General Plan, and is intended to be adopted by the Board of Supervisors as a part of the plan. The goals are contained in Component I because they are long-range in scope. Nevertheless, the goals are also a part of the General Plan. The goals are intended to guide the preparation and maintenance of Component II. The goals are not, nor are they intended to be, of sufficient detail to be a part of the analysis of individual projects. Amendments to the goals will be processed by the Advance Planning Division, reviewed by the Planning Commission, and adopted by the Board of Supervisors at public hearings. Notice will be provided as for General Plan amendments.

C. Component II: General Plan Elements

Purpose and scope: The purpose of Component II is to establish a General Plan for those lands within the jurisdiction of the County according to the requirements of Title 7 of the state Government Code. With the exception of the Transportation Element and some aspects of the Recreation and Safety elements, the elements of this component apply only to the unincorporated area. Through the Arterial Highway Financing Program, portions of the Transportation Element also apply to the cities (refer to the Transportation Element for details). Through the Orange County Flood Control District and Harbors, Beaches and Parks District financing programs, the Conservation, Safety and Recreation elements also apply to the cities. Component II is composed of the following elements: Land Use, Transportation, Housing, Noise, Public Services and Facilities, Recreation, Resources, Safety.

Component II is the mid-range portion of the Advance Planning Program, establishing objectives, policies, standards, and proposals for the county's 15- to 25-year planning needs. The year 2000 was originally chosen as the threshold year because of the large amount of data and plans available. However, the intent is to indicate growth levels that would result from the social and economic assumptions stated, and the level of development projected for 2000 may be achieved sooner or later than expected. New Projections, Orange County Preferred-1985 (OCP-85), were approved by the Board of Supervisors on February 19, 1985 to update the previous OCP-III growth projections. All General Plan elements will be consistent with the OCP-85 growth projections.

Relation to other planning: Component II is the most familiar component of the planning program. The County has worked with General Plan elements since 1973. While many improvements will be made to the elements, their role in the development process will be similar to pre-GPM conditions, consistent with Title 7 of the state Government Code.

The relationship between Components I and II is summarized above. There is also a strong relationship between Components II and III. The growth projections included in Component III must be compatible with the social and economic assumptions and growth projections of Component II. The maps, standards, and policies of Component III must also be compatible with those of Component II. Any change to the assumptions or provisions of one component must be reviewed against those of the other components to maintain compatibility.

Implementation: Component II is the County General Plan and will be implemented chiefly through the adoption of zoning ordinances and the review of private and public projects to determine their conformity with the General Plan in accordance with Section 65400 of the state Government Code. Other methods of implementation, like the County's Capital Improvement Programs and coordination with other agencies (special districts, LAFCO, etc.), will be stated in the appendices of each General Plan element.

Conformity review will include consistency with the stated social and economic assumptions and growth projections, as well as element maps, policies and programs. Zone changes proposing development intensity exceeding approved growth projections would be inconsistent with the General Plan. The Advance Planning Division will maintain an inventory of project approvals to ensure that cumulative impacts of projects are considered.

The General Plan elements will not typically be the primary source of conformity standards for projects more detailed than zone changes, such as tentative tract maps, site plans and use permits. In these instances, the greater detail of the planning maps, standards, and policies of Component III will provide the primary guidance. Thus, Component III will serve as one of the chief means of implementation of Component II for projects more detailed than zone changes.

Administration: Component II is composed of the elements of the General Plan, which will be implemented principally through the General Plan conformity process and Component III as noted above. In addition to the map and text which characterized the pre-GPM General Plan elements, each new element will include a statement of the threshold year and assumptions of social and economic conditions and growth projections upon which the element was based. These new statements will be considered a part of the element and used in the conformity review process along with the remainder of the text and map. The Advance Planning Division will prepare and maintain a manual for use by County staff in making conformity recommendations. Amendments to Component II will be processed by the Advance Planning Division, reviewed by the Planning Commission, and adopted by the Board of Supervisors after public hearings. Notice will be provided pursuant to the state Government Code and County ordinances and policies.

#### D. Component III: Community Profiles

Purpose: Component III is the most detailed portion of the Advance Planning Program. It is short-range in scope and focuses on detailed policies and programs. Component III depicts a wide variety of information, including: existing and proposed land uses; density and intensity standards; growth projections; development constraints and opportunities; location and extent of existing and proposed arterial highways and transportation corridors; existing and proposed numbers of dwelling units and population; conservation and natural resource areas; and open space and recreation areas. This component is intended to be the principal contact point between the Planning Program and the public.



Component III is not a portion of the General Plan.

Scope: Component III includes a separate community profile for each of the community analysis areas (CAAs) containing unincorporated area. Each profile constitutes a primary information and policy summary for its unique geographic area, including map information, statistical standards and a list of related policy documents.

Component III will identify short-range growth projections in five-year increments beginning with 1985 and proceeding through the threshold year of Component II (2010).

The Community Profiles (Component III of the Advance Planning Program) ensure the implementation of the policies of the General Plan. They will be used as follows:

- o The community profile area is the unit of analysis which will be used for evaluating infrastructure capabilities as they apply to individual project approvals.
- o The Planning Agency (which includes the Zoning Administrator, the Director of EMA, the Subdivision Committee, and the Planning Commission) and the Board of Supervisors will evaluate and consider the Community Profiles and compendium of policies in making planning decisions.
- o Prior to approval, all project proposals must be found consistent with the Community Profiles by the decision-making authority. In cases where inconsistencies exist, they shall be resolved and the community profile amended concurrently with processing of the discretionary approval.

Relation to other planning: Component III is a new addition to the Planning Program. However, it has many antecedents that will make its role in the planning process a familiar one. In the late 1950s and 1960s, the County pursued an Area Planning Program as the principal focus of its advance planning efforts. Most unincorporated communities were the subjects of such plans. The area plans gave way in 1973 to the Land Use Element (LUE) and other General Plan elements, but similar planning objectives have been fulfilled by supplements to the LUE, non-regulatory specific plans, community plans, corridor plans and similar planning documents. In fact, since 1973, these plans have proliferated so that they are widely applied. The Community Profiles will contain a list of these related plans and indicate the areas to which they apply, providing a single source of applicable policy documents.

In addition to other community planning documents, the Community Profiles will have a close relationship with Component II. In fact, Component III will be the principal means of implementing Component II, especially in the review of detailed development projects such as tentative tract maps, site plans and use permits.



Growth projections included in Component III must be consistent with the social and economic assumptions and growth projections of Component II. Also, the Component III maps, statistical standards and policies will be consistent with Component II. Any change to the assumptions or provisions of one component must be reviewed against those of the other components to ensure consistency.

Implementation: Component III will be implemented chiefly through application of zoning and the review of public and private development projects for conformity with the Community Profiles. Conformity will include consistency with the growth projections, as well as maps, statistical standards and policies of the Community Profiles. The Advance Planning Division will maintain an inventory of project approvals so that the cumulative impacts of projects are considered.

Administration: Component III is composed of the following items for each CAA: a map illustrating planned land uses; text including development standards; a list of related policy documents; assumptions of future social and economic conditions; and growth projections for the threshold years (1985, 1990, 1995, 2000, 2005, 2010). All public and private projects will be reviewed for consistency with each of these sections of the applicable community profile(s). Each part of the Community Profiles will be given equal weight in reviewing projects. Staff recommendations on projects will include discussion of the consistency of the project with Component III. The Advance Planning Division will prepare and maintain a manual for use by EMA staff in making consistency determinations and will also coordinate amendments to Component III. Amendments to the Community Profiles involving policy issues will be reviewed by the Planning Commission at noticed public hearings and its recommendations forwarded to the Board of Supervisors for consideration and possible adoption, also at noticed public hearings. Non-policy amendments will be reviewed by the Planning Commission at noticed public hearings and the decisions shall be final unless appealed to the Board of Supervisors. EMA shall prepare for Board adoption criteria for determining which amendments involve policy issues.

Technical refinement to the Community Profiles will be made by the Advance Planning Division. Criteria to be used in determining whether a change is an amendment or merely a technical refinement shall be established by the Board of Supervisors.

## CHAPTER TWO: THE LONG-RANGE PLANNING FRAMEWORK

### A. Introduction

The primary purpose of Chapter Two is to examine the long-term implications of policies and trends related to land use. Specifically, Component I will identify the general public service, environmental and policy impacts of three alternative futures implied by current policy directions. The alternatives (discussed in more detail below) are: (1) existing plus committed development (baseline); (2) continuation of existing trends; and (3) trends augmented for unplanned areas. These scenarios\* give the County benchmarks against which public and private projects will be evaluated for long-range implications. It is recognized that long-range policy projections are based on assumptions and that the assumptions are modified over time. The Component I scenarios, therefore, will be reevaluated and adjusted as the existing adopted policy projections are modified. The long-range growth scenarios will provide a planning tool; they will not represent a regulatory mechanism used for General Plan consistency determination. A single scenario will not be proposed for adoption, but rather development proposals and capital projects will be measured for compatibility with each scenario. Projects which preclude attainment of any alternative future could then be identified and carefully evaluated before a decision is made.

Component I is based on the extensive documentation and analysis available from the Orange County Preferred-1985 (OCP-1985) projections, the Multimodal Transportation Study (MMTS) and the Foothill Corridor Transportation Study. An evaluation of these studies, the Development Monitoring Program (DMP) and the Areawide Fiscal Impact System (AFIS) has been conducted for the formulation of long-range scenarios. This chapter will discuss the assumptions utilized for the development of the growth scenarios. The tables, maps and charts on the following pages illustrate the anticipated pattern of urbanization for each of the scenarios. General impacts, infrastructure demands and policy needs are also presented for each scenario.

### B. Overview of Scenarios

#### Scenario I: Existing Plus Committed Development

In general, this scenario assumes that development will continue at its present pace through 1995, but there will be little development or redevelopment to greater intensity thereafter due to a lack of adequate infrastructure, especially transportation. This scenario is consistent with the assumptions on which the Air Quality Maintenance Plan, the 208 Water Quality Program and MMTS were based. The total population for the county would be approximately 2,570,000 in 2020.

#### Scenario II: Continuation of Existing Trends

The basis of this scenario is the continuation of existing growth trends as represented by the current General Plan. The unincorporated area would be developed to the full extent of the existing Land Use Element. Ranches that are presently in agricultural use and have Open Space designations

\*Scenario: An outline for a possible series of future development events.

TABLE I-1

## COUNTYWIDE PROJECTIONS

(Numbers in Thousands)

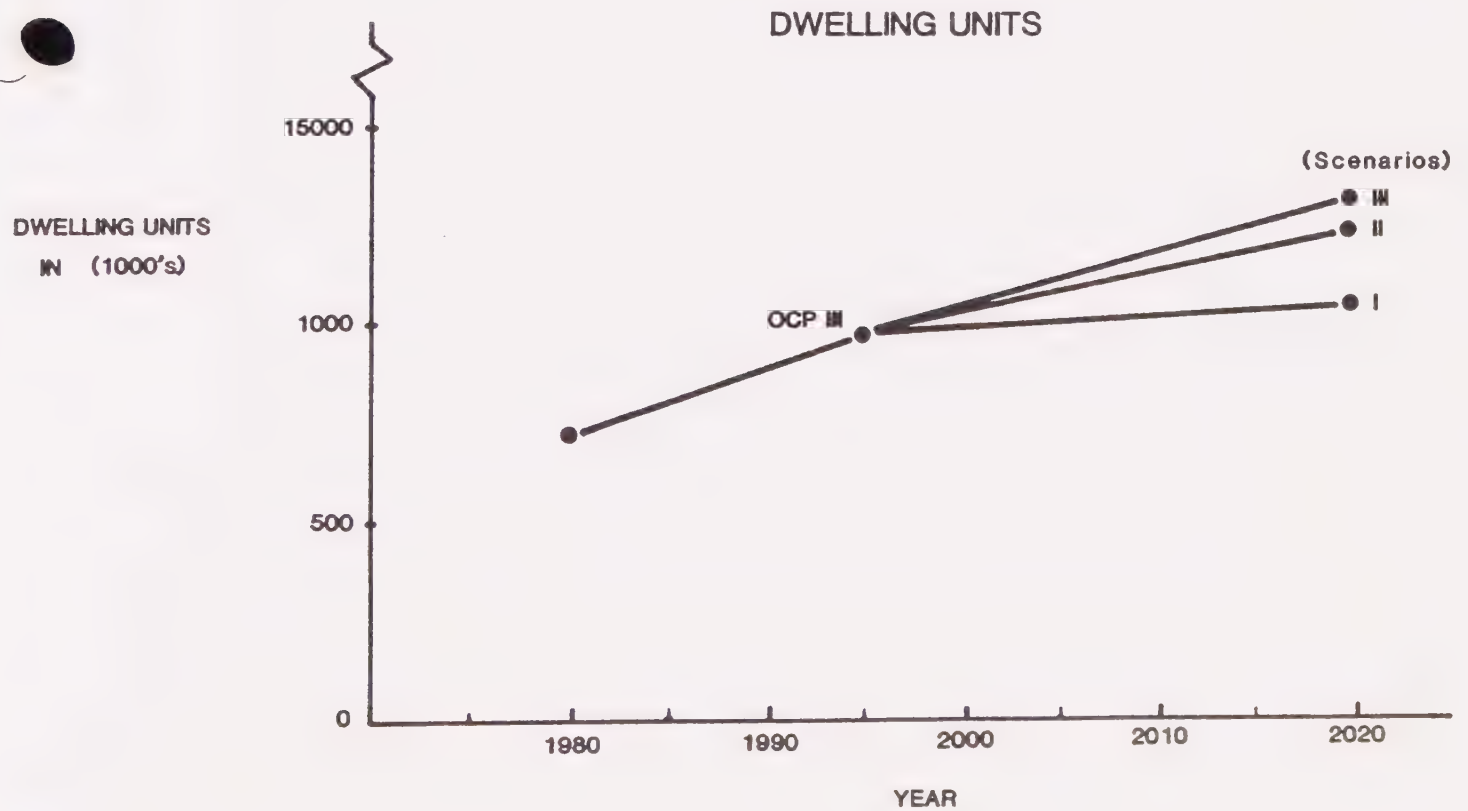
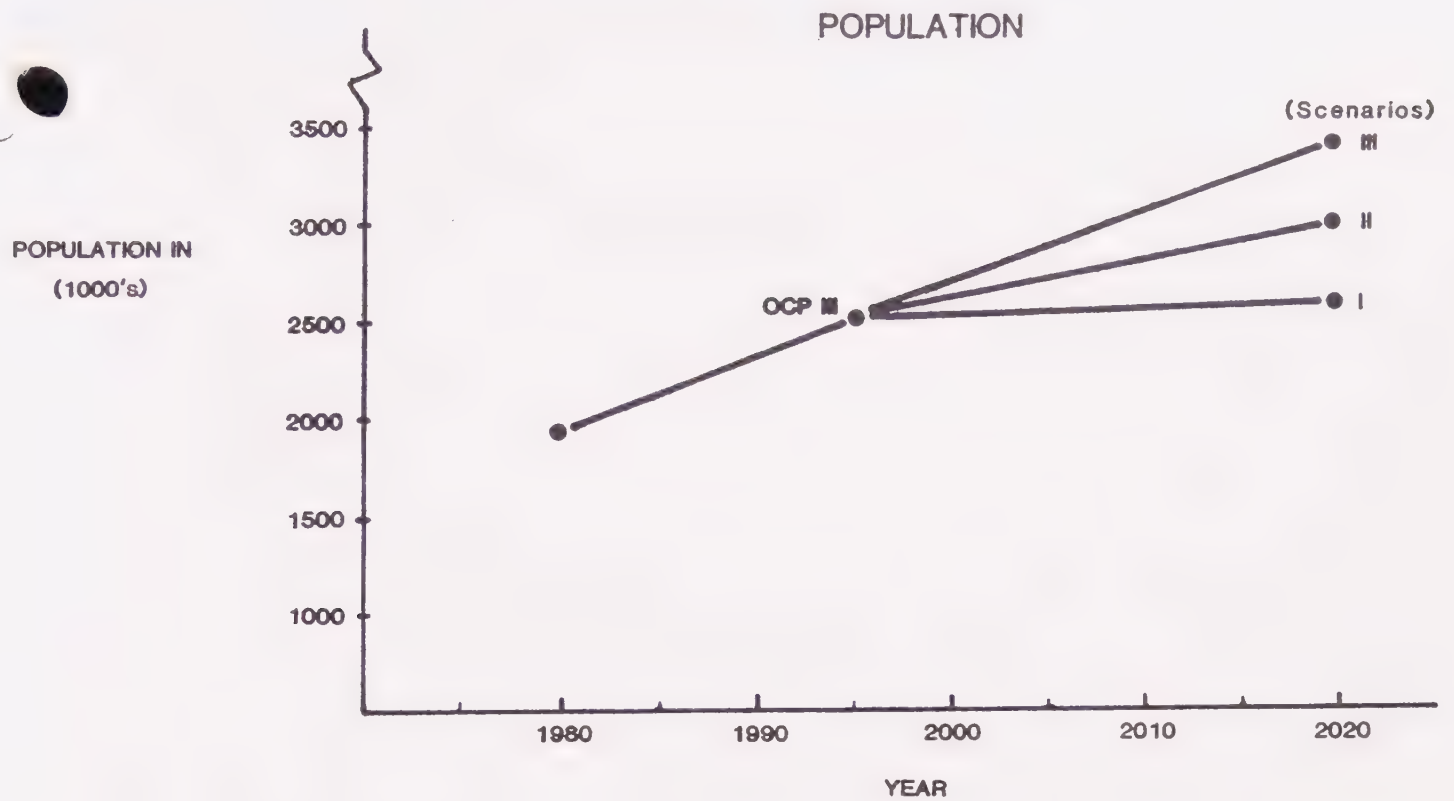
| COUNTYWIDE     | 1980              | 1995               | 2020 Scenarios |      |      |
|----------------|-------------------|--------------------|----------------|------|------|
|                |                   |                    | I              | II   | III  |
| Population     | 1932 <sup>*</sup> | 2528 <sup>*</sup>  | 2570           | 3000 | 3250 |
| Employment     | 943 <sup>*</sup>  | 1250 <sup>**</sup> | 1250           | 1450 | 1581 |
| Dwelling Units | 721               | 980 <sup>*</sup>   | 1040           | 1206 | 1303 |

Sources: \* OCP-III

\*\* MMTS - 79

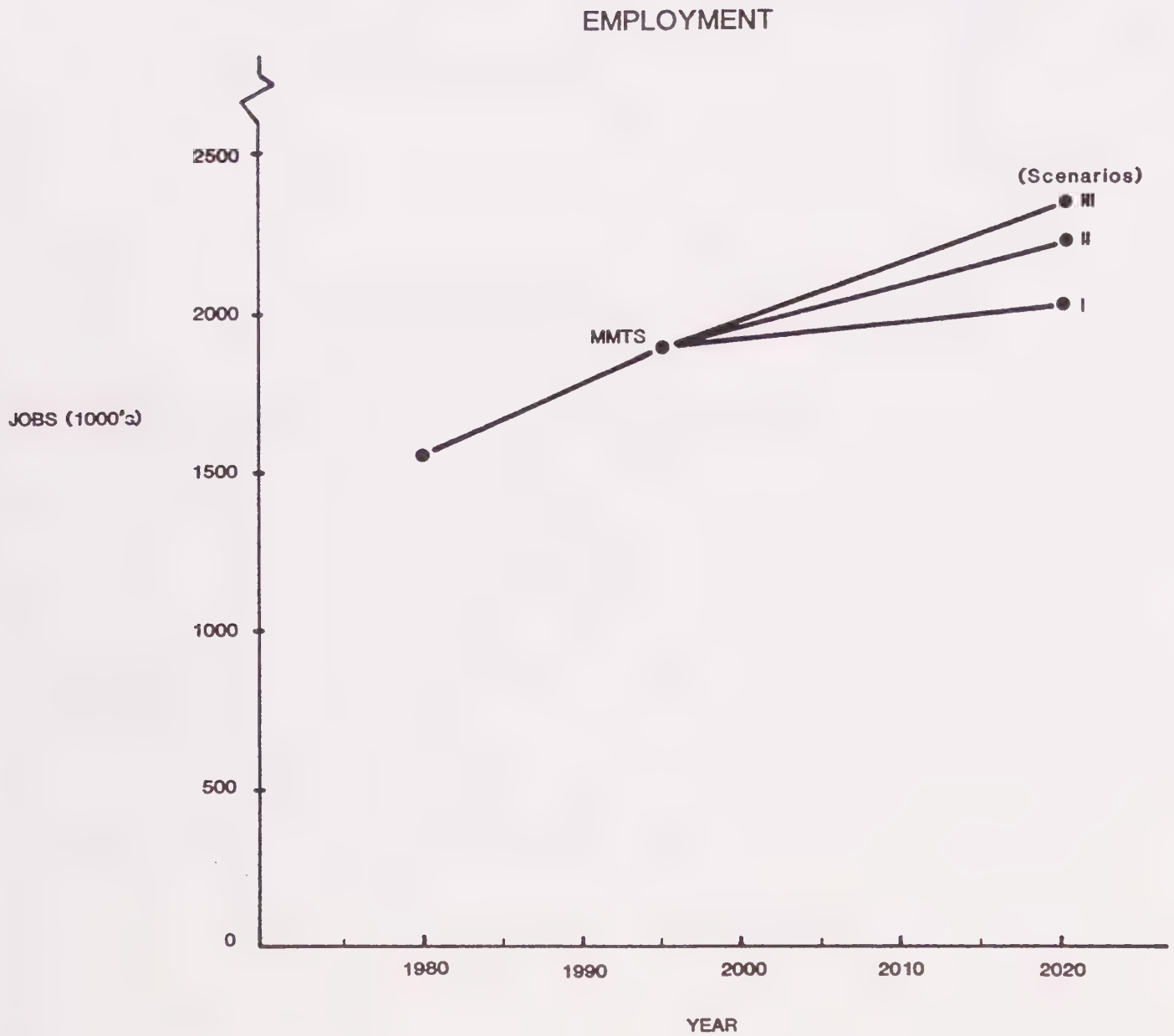


# COUNTYWIDE PROJECTIONS



SOURCE: 1980 U.S. CENSUS  
1995 OCP-III

# COUNTYWIDE PROJECTIONS



SOURCE: 1980: U.S. Census Bureau

1995: Multimodal Transportation Study

PROJECTED LEVELS OF DEVELOPMENT  
(ALL VALUES IN THOUSANDS)

| <u>POPULATION</u> |           |       |       | <u>TOTAL DWELLING UNITS</u> |       |       | <u>EMPLOYMENT</u> |       |       |       |
|-------------------|-----------|-------|-------|-----------------------------|-------|-------|-------------------|-------|-------|-------|
|                   | SCENARIOS |       |       | SCENARIOS                   |       |       | SCENARIOS         |       |       |       |
| RSA               | I         | II    | III   | I                           | II    | III   | I                 | II    | III   | RSA   |
| 35-J              | 172       | 199   | 199   | 62                          | 71    | 71    | 66                | 74    | 81    | 35-J  |
| 36-A              | 201       | 240   | 240   | 76                          | 91    | 91    | 137               | 157   | 162   | 36-A  |
| 37-H              | 381       | 451   | 451   | 153                         | 176   | 176   | 180               | 211   | 211   | 37-H  |
| 38-I              | 356       | 405   | 405   | 148                         | 169   | 169   | 122               | 125   | 137   | 38-I  |
| 39-F              | 264       | 294   | 294   | 115                         | 128   | 128   | 162               | 175   | 187   | 39-F  |
| 40-D              | 241       | 253   | 265   | 117                         | 123   | 129   | 84                | 91    | 99    | 40-D  |
| 41-B              | 200       | 220   | 225   | 76                          | 84    | 85    | 89                | 109   | 114   | 41-B  |
| 42-G              | 434       | 506   | 506   | 175                         | 204   | 204   | 255               | 314   | 314   | 42-G  |
| 43-C              | 169       | 193   | 339   | 58                          | 66    | 122   | 39                | 53    | 106   | 43-C  |
| 44-E              | 152       | 239   | 326   | 60                          | 94    | 128   | 116               | 151   | 170   | 44-E  |
| TOTAL             | 2,570     | 3,000 | 3,250 | 1,040                       | 1,206 | 1,303 | 1,250             | 1,460 | 1,581 | TOTAL |

TABLE I-2

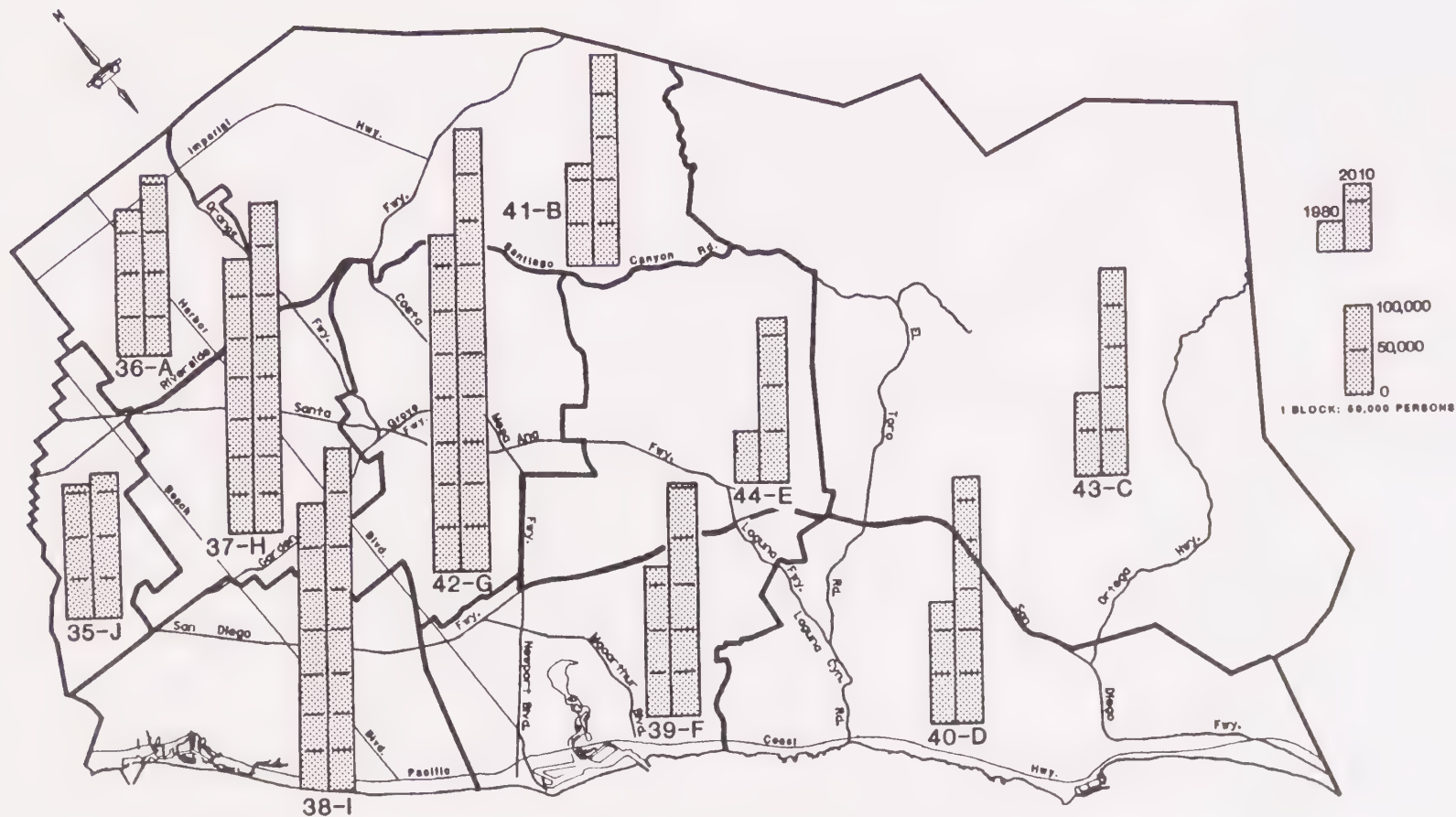
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TABLE 2-1  
ORANGE COUNTY DEMOGRAPHIC PROJECTIONS

| RSA    | POPULATION    |               | HOUSING       |               | EMPLOYMENT    |               |
|--------|---------------|---------------|---------------|---------------|---------------|---------------|
|        | <u>1980a/</u> | <u>2010b/</u> | <u>1980a/</u> | <u>2010b/</u> | <u>1980a/</u> | <u>2010b/</u> |
| 35-J   | 156,248       | 165,400       | 52,454        | 59,800        | 55,200        | 86,400        |
| 36-A   | 168,782       | 202,300       | 64,578        | 80,900        | 100,600       | 125,600       |
| 37-H   | 338,682       | 389,200       | 124,875       | 145,700       | 146,000       | 212,000       |
| 38-I   | 321,137       | 378,900       | 119,038       | 150,900       | 90,300        | 133,500       |
| 39-F   | 170,644       | 257,400       | 74,920        | 112,500       | 146,800       | 237,200       |
| 40-D   | 134,696       | 279,800       | 66,072        | 134,600       | 32,600        | 109,900       |
| 41-B   | 116,686       | 245,900       | 39,276        | 86,200        | 54,900        | 94,200        |
| 42-G   | 377,316       | 488,800       | 130,103       | 167,400       | 211,600       | 336,100       |
| 43-C   | 95,954        | 242,300       | 32,885        | 93,500        | 17,400        | 62,800        |
| 44-E   | 52,564        | 181,100       | 17,313        | 69,200        | 60,000        | 172,800       |
| COUNTY |               |               |               |               |               |               |
| TOTAL  | 1,932,709     | 2,831,100     | 721,514       | 1,100,700     | 915,400       | 1,570,500     |

Sources: a/ 1980 Census  
b/ County of Orange: OCP-85 Projections



# POPULATION By Regional Statistical Area

SOURCE: Orange County

OCP-85

MAP  
2-2

SOURCE: Orange County

OCP-85

MAP  
2-3





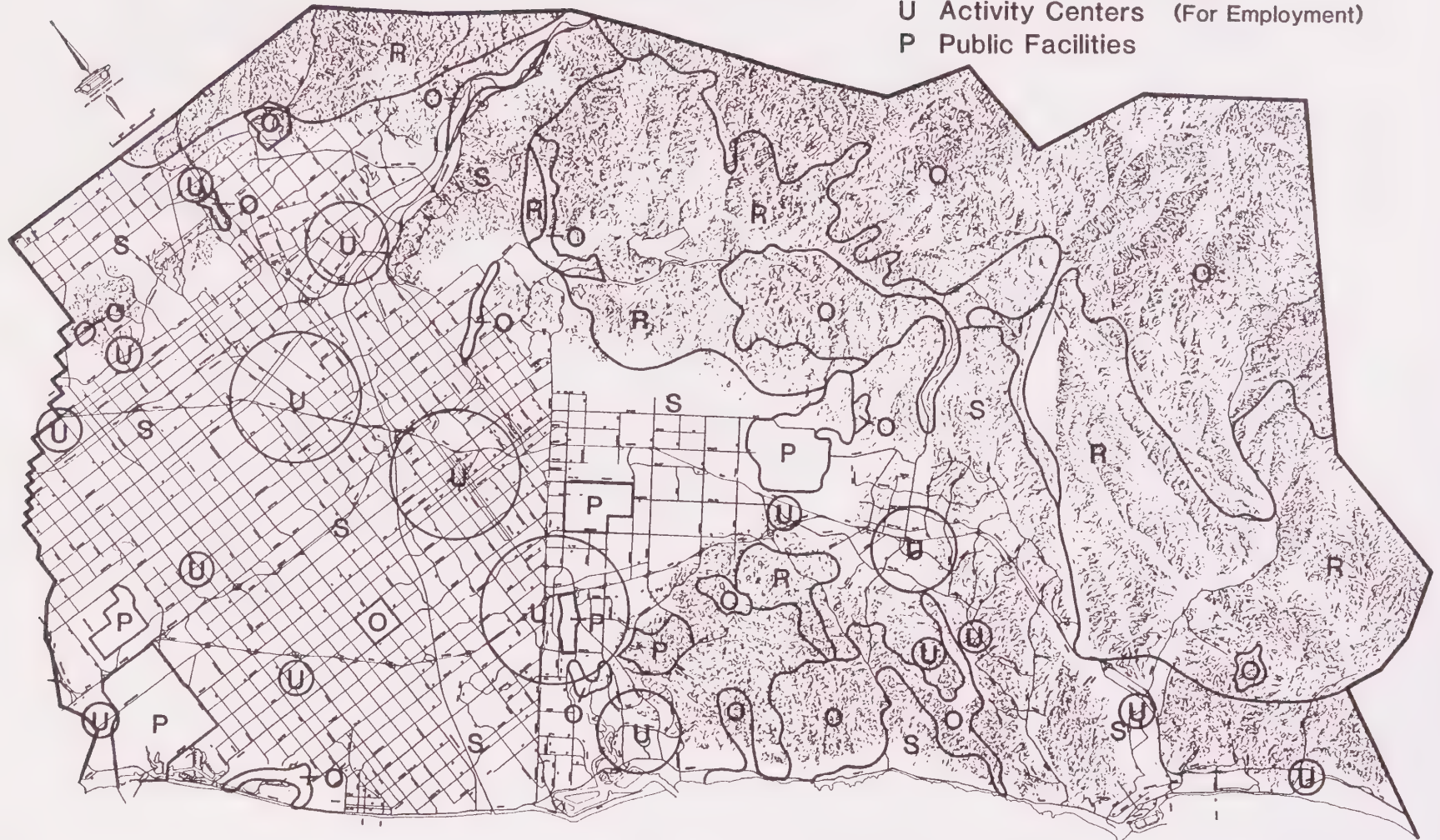
# EMPLOYMENT By Regional Statistical Area

SOURCE: Orange County  
OCP-85

MAP  
2-4

# SCENARIO ONE

- O Open Space, Regional Parks, National Forest
- R Rural Communities
- S Suburban Communities
- U Activity Centers (For Employment)
- P Public Facilities

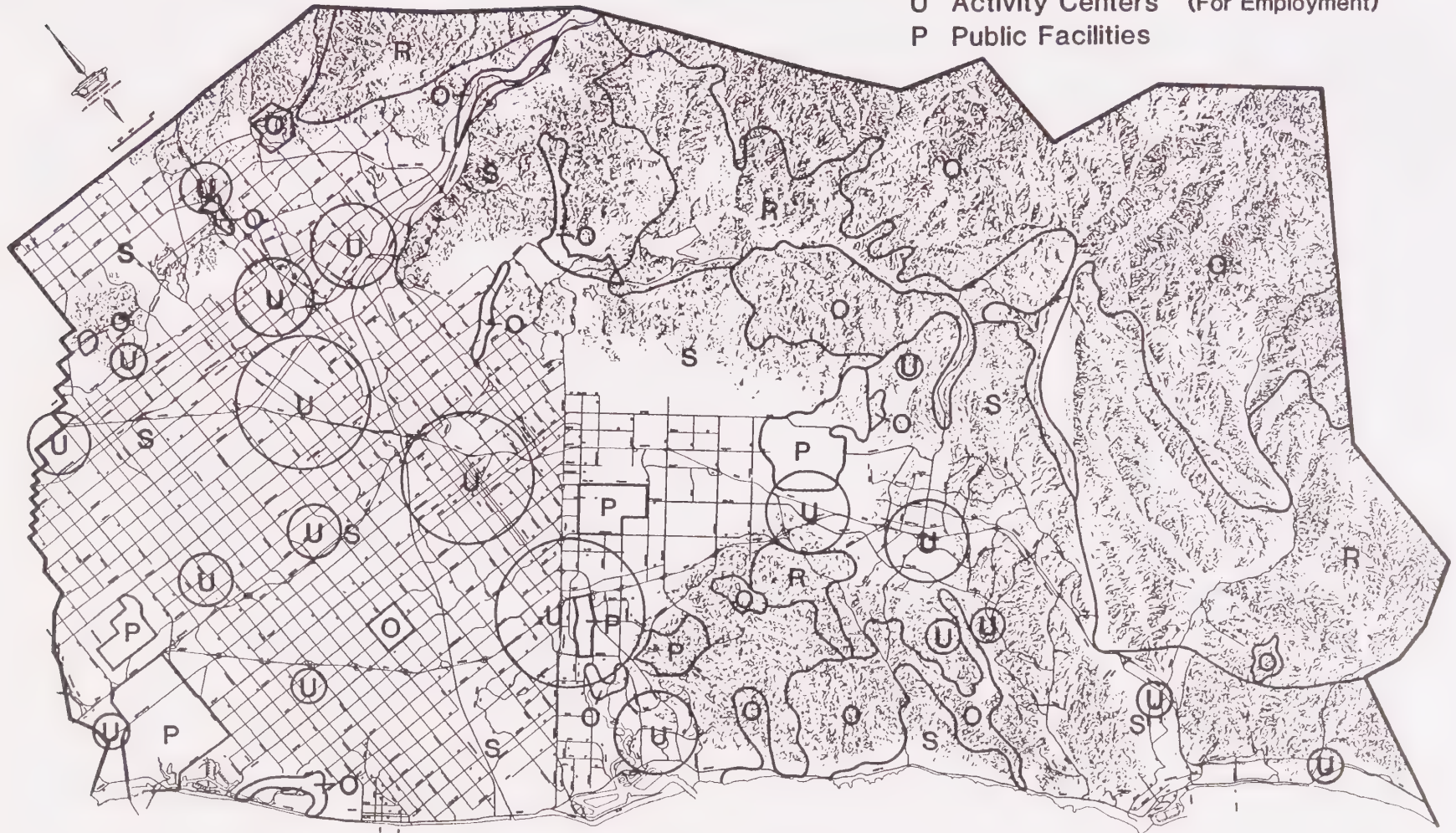


MAP I-4



## SCENARIO TWO

- O Open Space, Regional Parks, National Forest
- R Rural Communities
- S Suburban Communities
- U Activity Centers (For Employment)
- P Public Facilities

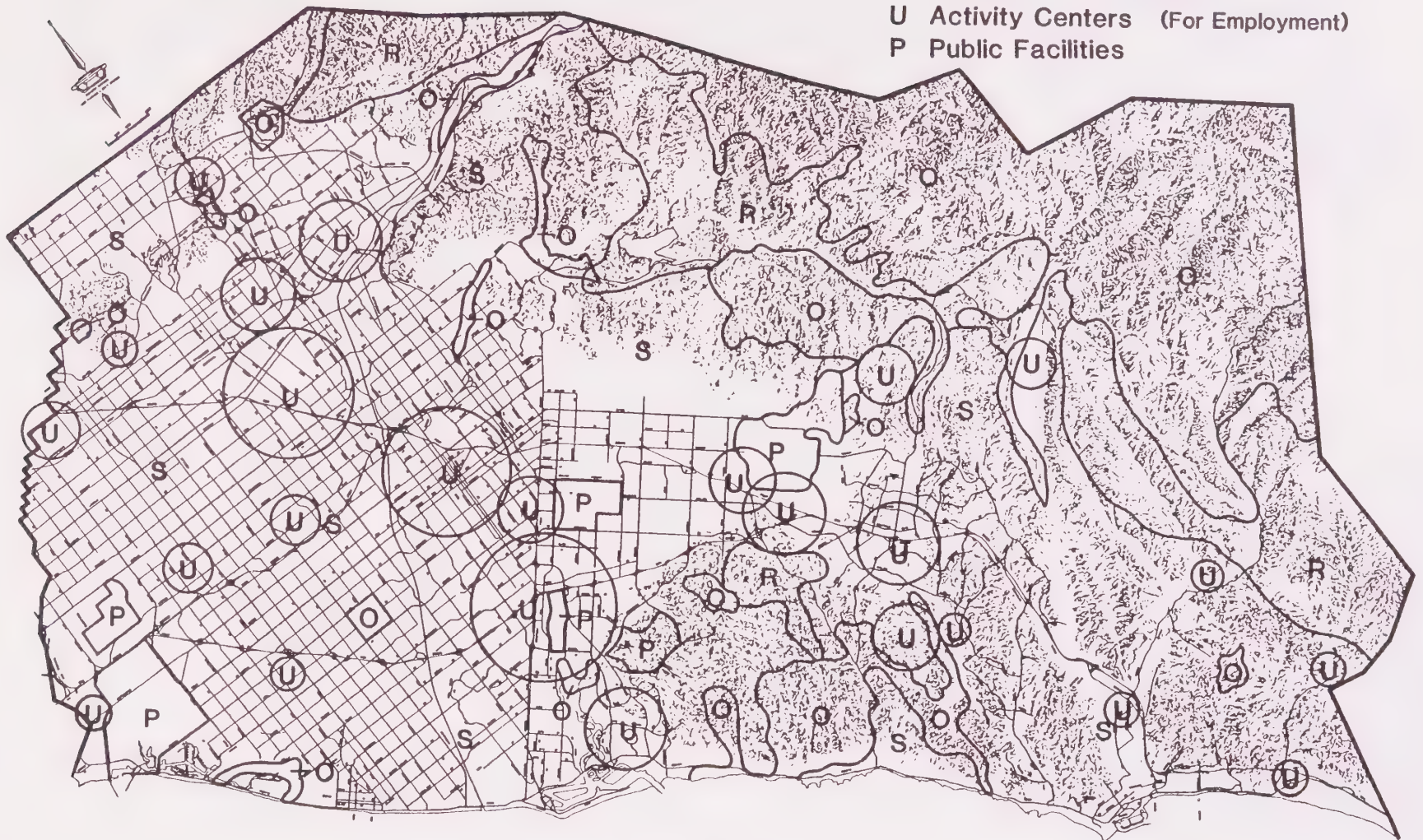


MAP I-5



# SCENARIO THREE

- O Open Space, Regional Parks, National Forest
- R Rural Communities
- S Suburban Communities
- U Activity Centers (For Employment)
- P Public Facilities



MAP I-6

would remain rural. The cities of Brea, Anaheim, Irvine, San Juan Capistrano, San Clemente and Orange, which have a considerable amount of developable land within their jurisdictions or spheres of influence, are assumed to experience continued growth between 1995 and 2020.

Redevelopment will occur in existing urban areas. The total population of the county would be approximately 3 million in 2020.

### Scenario III: Trends Augmented for Unplanned Areas

This scenario will utilize existing general plans plus the landowner development proposals presented in the Foothill Corridor Transportation Study, with minor modifications to reflect updated information. The events represented by this scenario would have the greatest impact on public services, the environment and County policy.

This scenario utilizes assumptions similar to Scenario II, except that the ranches located in the eastern and southern portions of the county are assumed to be developed. The total population of the county would be approximately 3,250,000 in 2020.

The tables, charts and maps on the preceeding pages illustrate the spatial distribution of growth for each scenario. The following discussion of assumptions clarifies the anticipated pattern and intensity of urbanization.

#### C. Component I: Scenario Assumptions

The following assumptions pertain to all of the scenarios:

- o The average number of persons per dwelling unit will increase from the current countywide figure of 2.68 to 2.73 by the end of the projection period, with a sub-area range of 2.05 to 2.91.
- o John Wayne Airport will be developed according to master plan but no new short-haul or regional airport will be developed in or near Orange County, as approved in OCP-85.
- o The Marine Corps Air Stations at El Toro and Tustin, the Seal Beach Naval Weapons Station and the Los Alamitos Armed Forces Reserve Center will remain in government ownership and use throughout the period of these projections.
- o There will be no prolonged national or regional depression but there may be recurring recessions.
- o There will be a continued market of home buyers of an appropriate income range to sustain demand for housing in Orange County, as approved in OCP-85.
- o Housing costs will increase more rapidly than the Consumer Price Index but low- and moderate-income housing opportunities will continue to exist.



- o Significant employment growth will occur in all three scenarios, maintaining a jobs-to-population ratio of 0.48.
- o Filling jobs at or near minimum wage levels will be constrained by housing and transportation costs. Many such positions will be filled by households' second wage earners.
- o The service sector is expected to be the fastest-growing segment of the employment base.

In the sections that follow, assumptions for each scenario are identified. These assumptions, which relate to either a condition, an event or a trend, are the basis for each growth projection.

#### Scenario I: Existing Plus Committed Development

- o The countywide projections of population, housing and employment do not exceed that which would be allowable under the general plans currently in force in the cities and the county.
- o Significant redevelopment will not occur anywhere in the county in this scenario, although there will be isolated areas where property is recycled to more intensive uses.
- o Between 1980 and the end of the projection period, the county's population will grow at a simple average annual rate of less than one percent.
- o The limited availability of essential infrastructure facilities will impede both population and employment growth after 1995.
- o By 2020, the county is assumed to reach a population of 2,570,000, which is an increase of nearly 638,000 persons over 1980. This growth represents an increase of approximately 33 percent, and will occur at a fairly steady rate. This population level is essentially the same as that utilized in the Multimodal Transportation Study.
- o The countywide level of employment in 2020 will be approximately 1,250,000.

#### Scenario II: Continuation of Existing Trends

- o The countywide projections do not exceed that which would be allowable under the general plans currently in force in the cities and the county.
- o Significant redevelopment, funded by both public and private sources, will occur in the northwestern portion of the county.
- o The availability of essential physical public services and infrastructure will not impede population and employment growth generally, but it may temporarily retard construction in newly-developing areas.
- o Between 1980 and the end of the projection period, the county's population will grow at a simple average annual rate of 1.4 percent.



- o The county is expected to reach a population of 3 million by 2020, a gain of 1,068,000 persons. This growth represents an increase of approximately 55 percent.
- o The countywide level of employment in 2020 will be approximately 1,460,000.

#### Scenario III: Trends Augmented for Unplanned Areas

- o The countywide projections do not exceed that which would be allowable under the general plans currently in force in the cities, except in redevelopment areas in the northwest portion of the county and those geographic areas identified in Appendix A.
- o Significant redevelopment, funded by both public and private sources, will occur in the northwestern portion of the county. The rate of growth in this area will be similar to the period 1970-80.
- o The availability of essential physical services and infrastructure will not impede population and employment growth generally, but it may temporarily retard construction in newly-developing areas.
- o Between 1980 and the end of the projection period, the county's population will grow at a simple average annual rate of 1.7 percent.
- o By 2020 the county is expected to reach a population of 3,250,000, a gain of nearly 1,318,000 persons over the 1980 level. This growth represents an increase of approximately 68 percent. The population total used in this scenario is generally consistent with the State Department of Finance's Series E-150 projections.
- o The countywide level of employment in 2020 will be approximately 1,580,000.

#### D. Regional Statistical Area (RSA) Discussions

For long-range planning purposes, the county is divided into ten zones known as regional statistical areas (RSA's). The following is a discussion of the scenario assumptions for each RSA. Appendix B contains a series of tables for the RSA's illustrating scenario growth patterns.

##### RSA 35-J

RSA 35-J is characterized by urban and suburban uses. A majority of the land area is incorporated within the cities of Buena Park, La Palma, Cypress and Los Alamitos. The cities of La Palma and Cypress experienced most of their growth in the late 1960's and 1970's, and have a suburban residential character. Most of the land area within the city of Los Alamitos is located in the Los Alamitos Armed Forces Reserve Center. The city of Buena Park developed over a forty- to fifty-year period and has the greatest potential for intensification of activity. Buena Park has a regionally significant activity area adjacent to the Santa Ana Freeway and continuing south along

Beach Boulevard. It includes Knott's Berry Farm and the Buena Park Shopping Mall.

In Scenario I, RSA 35-J will experience moderate growth with a 10 percent gain in population and a 16 percent rise in employment. This represents a population increase of 15,000 and an employment gain of 9,000. A majority of this growth will be in the city of Buena Park. In Scenarios II and III, the development trends will be greater, with a population increase of 42,000 (27 percent) in both scenarios and employment increases of 17,000 (30 percent) and 24,000 (42 percent), respectively.

In Scenario III, the intensification of activity will be focused in Buena Park and its regional activity area.

#### RSA 36-A

RSA 36-A is predominantly developed with urban uses at the present time. The majority of the land area is incorporated within the cities of La Habra, Fullerton and Brea. Each of these cities has a central business district which is being revitalized. The RSA is bounded on the south by the Riverside Freeway and on the east by the Orange Freeway. These two transportation corridors have influenced past urban growth and will continue to do so in the future. There are three regionally significant activity centers within the RSA: 1) the Brea Mall and adjacent area; 2) the educational facilities centered on California State University, Fullerton and the employment area south of the University, located parallel to the Riverside Freeway; and 3) the Hughes facility and the industrial area adjacent to the Fullerton Airport.

In Scenario I, this area will experience a moderate growth of 19 percent in both population (32,000 people) and employment (21,000 jobs). A majority of the growth will result from intensification of activities in the already urbanized portion of the RSA. In Scenarios II and III, the level of development will be greater, with a population growth of 71,000 (40 percent) in both scenarios. Employment is expected to grow by 41,000 (35 percent) in Scenario II and 45,000 (40 percent) in Scenario III. This growth will be focused in the previously identified regional activity centers, although some scattered recycling will occur in other parts of the RSA.

#### RSA 37-H

RSA 37-H is urbanized at the present time. The majority of the RSA is incorporated within the cities of Anaheim, Stanton and Garden Grove. Anaheim and Garden Grove have central business districts (CBD's) that are being revitalized as community activity centers. The RSA is bounded on the north by the Riverside Freeway, on the east by the Orange Freeway, and on the south by the Garden Grove Freeway. The area is bisected by the Santa Ana Freeway. Its grid arterial highway system enhances access to these transportation facilities from any portion of the RSA. These transportation corridors have influenced past urban growth within the RSA and will continue to do so in the future. There are two major activity centers within the RSA: 1) the Anaheim CBD southwesterly to Disneyland and its adjacent commercial area, including the industrial and commercial activity along the

Orange Freeway near Anaheim Stadium; and 2) the employment activity north of the Garden Grove Freeway between Knott Street and Beach Boulevard.

In Scenario I, RSA 37-H will experience a gain of 42,000 (12 percent) in population and 14,000 (9 percent) in employment. The majority of this growth will be focused in the regional activity centers. However, significant intensification of residential development will occur throughout the RSA. In Scenarios II and III, the development trends are significantly higher, with population increasing by 112,000 (33 percent) and employment by 42,000 (27 percent). A new activity center will develop in the city of Garden Grove along Garden Grove Boulevard between Euclid Street and Brookhurst Street.

#### RSA 38-I

RSA 38-I is mostly developed with urban and suburban uses at the present time. The majority of the land area is within the incorporated cities of Seal Beach, Westminster, Fountain Valley and Huntington Beach. Most of the development in this RSA can be characterized as suburban residential. The Seal Beach Naval Weapons Station occupies a significant portion of the city of Seal Beach. There is a considerable amount of under-utilized employment acreage in Huntington Beach. Two small activity centers are located in this RSA; the Westminster Mall/Golden West College/Huntington Center area, and the Rockwell International Facility in Seal Beach. This RSA will continue to have tourist recreational activities along the coast.

In Scenario I, RSA 38-I will experience a growth of 35,000 (11 percent) in population and 29,000 (31 percent) in employment. A majority of the residential growth will be infill of vacant land and the recycling of older residential areas. The employment growth will be concentrated in already established employment areas. The Huntington Beach CBD is expected to be revitalized and activity along the Beach Boulevard corridor will become more intense. In Scenarios II and III, population will increase by 26 percent, a gain of 84,000 people. Employment will increase by 32,000 (34 percent) in Scenario II and by 44,000 (47 percent) in Scenario III. The increase in employees represents an intensification of employment activities in the previously mentioned geographic areas.

#### RSA 39-F

RSA 39-F is divided into several distinct geographic areas, each with its own character. The city of Costa Mesa and the older areas of Newport Beach have developed over the last forty- to fifty-year period and have the greatest potential for intensification of activity. These areas have a variety of mixed uses and densities of development. There are two significant regional open space areas (Newport Bay and the Irvine Coast). The coastal area will continue to be a prime tourist, recreation and commercial area. There are four regionally significant activity centers within the RSA: 1) Newport Center and adjacent area; 2) South Coast Plaza and adjacent employment areas; 3) the John Wayne Airport and adjacent employment areas; and 4) the University of California, Irvine and the adjacent Town Center. The southern portion of the city of Irvine is planned for both residential and employment activities.



The RSA is presently served by the San Diego Freeway, the Newport Freeway and the Corona Del Mar Freeway. In the future, the proposed San Joaquin Hills Transportation Corridor and the extension of the Corona Del Mar Freeway will further enhance access to this RSA and its regional activity centers.

In Scenario I, this area will experience a growth of 92,000 (54 percent) in population and 21,000 (15 percent) in employment. A majority of this growth will be in the city of Irvine and the regional activity centers of Newport Beach and Costa Mesa. Some recycling will occur in the older areas of Costa Mesa and Newport Beach. In Scenarios II and III, the population will increase by 71 percent, a gain of 122,000 persons. This represents a further intensification of activities in the presently developed areas. In Scenario II, employment increases 24 percent, a growth of 34,000; in Scenario III, there is an increase of 33 percent, a gain of 46,000 employees. This RSA will attract major firms and regional employment activities. While some of its coastal residential areas will be the most affluent in the world, the area will also contain a significant variety of lower-cost housing opportunities.

#### RSA 40-D

RSA 40-D is divided into several distinct geographic units. There are three cities within the area (Laguna Beach, San Juan Capistrano, and San Clemente). The city of Laguna Beach was developed over a forty- to fifty-year period and has a variety of housing types. Employment is oriented toward tourist, recreation and commercial activities. This pattern and the city's role as an artist's colony and tourist recreation area are expected to continue. While the city will not grow significantly in the future, considerable recycling will occur. San Juan Capistrano and San Clemente have a suburban residential character except for their historical CBD's.

A majority of the area is unincorporated and most development is within planned communities. Development in the unincorporated area is primarily suburban residential; however, each area is developing distinct community characteristics. Significant open space will continue to exist along the Irvine Coast and around the city of Laguna Beach. There are several significant open space corridors linking these areas with inland open space areas.

The area is served by the San Diego Freeway, Pacific Coast Highway and, in the future, by the San Joaquin Hills Transportation Corridor.

In Scenario I, this area will experience a gain of 106,000 (79 percent) in population and 51,000 (155 percent) in employment. A majority of this growth will be in planned communities in the unincorporated area. The area will have two regional activity centers: 1) Laguna Hills Mall and its adjacent industrial, commercial, and professional employment areas; and 2) the Aliso Viejo and Narland Planned Communities, and the GSA facility and adjacent employment areas. In Scenario II, the population will increase by 118,000 (88 percent) and employment by 58,000 (176 percent). In Scenario III, there will be a gain of 130,000 (96 percent) in population and 66,000 (200 percent) in employment. The intensification of activities in Scenario

III indicates complete development of the cities previously mentioned and all planned unincorporated areas.

#### RSA 41-B

At present RSA 41-B is only partially developed. A majority of the area is incorporated within the cities of Brea, Placentia, Yorba Linda, Anaheim and Orange. A significant portion of the unincorporated area is within the sphere of influence of Orange and Anaheim or within Cleveland National Forest. The city of Placentia is mostly developed but will experience some infill and recycling in the future. The city of Brea has employment acreage planned for development along Imperial Highway and the Orange Freeway. This area is an extension of the regional activity center discussed in RSA 36-A, which is centered at the Brea Mall. Brea contains considerable vacant land suitable for residential development. Yorba Linda is developing with a rural and suburban residential character and that trend is expected to continue in the future.

The city of Anaheim has an existing regional activity center located along the Riverside Freeway that will undergo further development in the future. The Anaheim Hills area will continue to grow as a suburban residential community. There will be a new regional shopping mall located at the Riverside Freeway and Weir Canyon Road. The city of Orange and its sphere of influence to the east are planned for suburban residential development.

In Scenario I, RSA 41-B will experience a 71 percent increase in population (83,000) and a 78 percent gain in employment (39,000). In Scenario II, population will grow by 88 percent and employment by 118 percent (103,000 people and 59,000 employees, respectively). A large area is assumed to shift from rural to suburban uses in Scenarios II and III. This pattern is shown on the scenario maps. In Scenario III, population and employment growth is 92 percent and 64 percent, respectively (108,000 people and 64,000 employees). This would represent complete development of the residential areas with recycling of older residential areas and intensification of the activity centers.

#### RSA 42-G

RSA 42-G is largely developed today. A majority of the area is within the cities of Orange, Santa Ana, Tustin and Villa Park. Orange and Tustin have central business districts (CBD's) that are being revitalized as community activity centers. The Santa Ana CBD is being revitalized as a regional activity center and governmental center. The RSA is bounded on the west by the Orange Freeway, on the north by the Riverside Freeway, and is bisected by both the Costa Mesa and the Santa Ana Freeways. Its arterial highway system provides convenient access to these regional transportation corridors. These corridors have had a strong influence on patterns of urbanization and will continue to do so in the future. There are three regional activity centers within the RSA: 1) the City Shopping Center and employment areas, Santa Ana Fashion Square, and the Main Street corridor south to the Santa Ana CBD and Civic Center Plaza; 2) the continuation of the regional activity center in RSA 37-H which extends from Anaheim Stadium easterly to the employment activity in Orange adjacent to the Santa Ana



River; and 3) the extension of employment activity west of the Irvine Industrial Complex-West along the Costa Mesa Freeway.

In Scenario I, RSA 37-H will experience a population growth of 57,000 (15 percent) with an employment increase of 36,000 jobs (16 percent). In Scenarios II and III, the growth of population is 129,000 (34 percent) while the employment gain is 95,000 (44 percent). A majority of growth will be focused in the regional activity centers.

#### RSA 43-C

RSA 43-C is partially developed with a suburban character in the El Toro, Lake Forest and Mission Viejo area. The majority of the area is still rural and open space. A large portion of Cleveland National Forest is within this RSA. The area is mostly unincorporated except for small portions of the cities of San Clemente and San Juan Capistrano. The San Diego Freeway is the major transportation corridor. The proposed Foothill Transportation Corridor will bisect the developable portions of this RSA in the future. A majority of the developable acreage is within the 43,000-acre Rancho Mission Viejo. This RSA has the widest variety of scenario assumptions because of its extensive undeveloped and unplanned areas, the recently planned public service improvements, and its location on the fringes of urbanization.

The undeveloped and unplanned area is assumed to remain rural in Scenario I. In Scenario I, the increase in population is 76,000 (82 percent) with a gain of 21,000 new jobs (117 percent). In Scenario II, all of the presently planned areas would be developed. The projected population and employment growth is 100,000 persons (108 percent) and 35,000 jobs (195 percent), respectively. In Scenario III, current trends This pattern would be the same as the post-1995 growth scenario evaluated in the Foothill Transportation Corridor Study; the area would experience an increase of 246,000 (265 percent) in population and 88,000 (489 percent) in employment. In Scenario III, there are four regional activity centers projected within the area: 1) Whiting Ranch, Osterman Ranch, and A. J. West employment areas; 2) the Plano Trabuco employment area; 3) the employment activity center at the crossing of the Foothill Transportation Corridor and Ortega Highway; and 4) the Talega employment area located northeast of San Clemente.

#### RSA 44-E

RSA 44-E is a mixture of urban and suburban activities and open space at the present time. Approximately half of the area is within the cities of Irvine, Tustin, and Santa Ana. Most of the unincorporated area within the RSA is in the Irvine sphere of influence. The Marine Corps Air Stations at El Toro and Tustin are located here. Irvine's General Plan for the city and its sphere of influence proposes various levels of development for the remainder of the area. There are two major regional activity centers under development: the Irvine Industrial Complex (IIC)-West and adjacent employment activities, and the IIC-East/Irvine Center/Alton-Barranca corridor. The IIC-West has had significant development for the last ten years, while the IIC-East is still in the early stages of development. The



central portion of Irvine between the Santa Ana Freeway and San Diego Freeway contains substantial residential development with more planned.

The area is presently served by the Newport Freeway, the Laguna Freeway, the Santa Ana Freeway and the San Diego Freeway. These corridors have influenced urban development within the RSA and will continue to do so in the future. The proposed Eastern and Foothill Transportation Corridors will further enhance access to this RSA and its regional activity centers upon their completion.

In Scenario I, RSA 44-E will experience a gain of 99,000 (187 percent) in population and 67,000 (137 percent) in employment. In Scenario II, projected development would result in growth of 186,000 (350 percent) persons and 102,000 (208 percent) employees. In Scenario III, development trends identified for post-1995 in the Foothill Transportation Corridor Study were used, representing an increase of 273,000 (515 percent) in population and 121,000 (247 percent) in employment. This area will strongly influence the future character of the county.

#### E. Component I: Scenario Analysis

##### Overview

This section presents the infrastructure demand and general impacts of each scenario. The development of major public service facilities such as transportation corridors requires considerable time and expense. From the time long-range needs are identified until construction occurs, 10 to 15 years or more may pass. In order to plan facilities that will ultimately be required, it is critical to assess future demand through the development and analysis of long-range scenarios. The major focus of the analysis will be on highways since the County has direct responsibility for the planning and implementation of an adequate highway system. The development of evaluation criteria and factors to estimate demand for recreation, housing, and other infrastructure must await restructuring of the appropriate elements of the General Plan. This restructuring will occur over the next 18 months. As adequate information becomes available, this scenario analysis will be augmented. Other public services are typically the responsibility of other jurisdictions such as special districts. Long-range needs for all these services will be addressed by an Alternative Futures Study subsequent to GPM.

The scenario analysis relies entirely on the extensive documentation from the Multimodal Transportation Study (MMTS), the Foothill Corridor Transportation Study and the Transportation Element. For each scenario, transportation demand is evaluated at the corridor level of analysis with emphasis on system-wide need and impacts. Transportation corridors are identified to meet projected demand for facilities with capacities greater than major arterial highways (approximately 60,000 vehicle trips per day). These corridors may consist of highways, freeways, transitways or a combination of such facilities to be determined in future studies.

This analysis indicates that even with a significantly higher level of travel capacity, future highway travel in Orange County may be more

difficult, in terms of congestion and slow travel speeds, than that seen today. The extent of urbanization projected for the scenarios is as follows: Scenario I, 460 square miles; Scenario II, 495 square miles; and Scenario III, 531 square miles.

The previous presentations of assumptions for each scenario and the RSA-level discussions of development trends and their spatial distribution establish the framework and background necessary for an analysis of general impacts of development and infrastructure demand. The following sections contain analyses of transportation and air quality.

### Transportation Analysis

The previous transportation studies noted above estimated travel demand for each scenario. The vehicle miles traveled (VMT), vehicle hours traveled (VHT), speed, delay time, and vehicle trips are shown in Table I-3. Transit demand was estimated in both the MMTS and Foothill Corridor Transportation Study and figures presented are exclusive of the estimated transit demand. For detailed transit information, refer to those studies.

Vehicle miles traveled (VMT) is 18 percent higher in Scenario II than Scenario I, and 8 percent higher in Scenario III than Scenario II. The difference between the scenarios can be attributed to the projected level of population and employment, and the phasing of transportation improvements in Orange County. While population is expected to be 17 percent higher in Scenario II than Scenario I and 8 percent higher in Scenario III than II, additional transportation improvements assumed in previous studies are expected to be minimal by comparison.

Vehicle hours traveled (VHT) is 18 percent higher in Scenario II than Scenario I and 27 percent higher in Scenario III than Scenario II. VHT in Scenario III increases due to the amount of delay time and lower speeds caused by the imbalance of urbanization compared to transportation infrastructure. The level of service on the arterial highways in Scenario III will deteriorate and affect most vehicle travel times. As can be observed with each scenario increment, the average speed of the transportation system decreases. This is especially applicable in Scenario III with an 11 percent decrease.

The delay time, which represents the additional time required to travel from one point to another during congested periods as compared to uncongested conditions, is a significant measure of system-wide congestion. The delay time is 11 percent higher in Scenario II than Scenario I, and is 33 percent higher in Scenario III than Scenario II. While VMT and vehicle trips are not substantially higher in Scenario III than Scenario II, insufficient transportation improvements cause lower travel speeds and higher VHT and delay time.

The level of development assumed in Scenario I is virtually the same as that in MMTS. Therefore, the transportation system selected in that study forms the basis of analysis for Scenario I. Much of the following is from the work prepared by the Orange County Transportation Commission. The study evaluated the potential effects of various transportation systems including

Vehicle Travel Characteristics\*  
(Numbers in Thousands)

| Orange<br>County<br>(24 hr)     | Scenario<br>1 | % Change<br>from 1 to 2 | Scenario<br>2 | % Change<br>from 2 to 3 | Scenario<br>3 |
|---------------------------------|---------------|-------------------------|---------------|-------------------------|---------------|
| Vehicle Miles<br>Traveled (VMT) | 62,810        | +18                     | 73,932        | +8                      | 80,070        |
| Vehicle Hours<br>Traveled (VHT) | 3,850         | +18                     | 4,538         | +27                     | 5,755         |
| Speed                           | 16.36         | Neg.                    | 16.34         | -11                     | 14.58         |
| Delay Time                      | N/A           | N/A                     | N/A           | N/A                     | N/A           |
| Vehicle Trips (VT)              | 7,044         | +18                     | 8,293         | +9                      | 8,024         |
| <u>Study Area</u> <sup>a/</sup> |               |                         |               |                         |               |
| Vehicle Miles<br>Traveled (VMT) | 96,630        | +12                     | 107,752       | +6                      | 113,890       |
| Vehicle Hours<br>Traveled (VHT) | 5,910         | +12                     | 6,598         | +18                     | 7,815         |
| Speed                           | 16.35         | Neg.                    | 16.33         | -11                     | 14.57         |
| Delay                           | 2,765         | +11                     | 3,065         | +33                     | 4,085         |
| Vehicle Trips (VT)              | 12,357        | +10                     | 13,606        | +5                      | 14,337        |

Neg - Negligible

\*Results from South Orange County Circulation Study (SOCCS) model.

a/ MMTS Study Area: Orange County, portions of Los Angeles and Riverside Counties

I-2-22



the construction of additional freeways, arterials, and transit improvements. The principal findings of the MMTS report are:

1. There will be substantial growth in travel.
2. Even with substantially increased capacity, the transportation system will be overloaded by future travel demand.
3. Although conservative assumptions regarding transit use have been applied, significant growth in transit usage is anticipated.
4. Ridesharing is expected to grow significantly.
5. The existing 1980 highway and freeway system will comprise the vast majority of transportation system that will be in place at the end of the study period.

Growth in travel will occur as a result of increased population and employment. Person trips are expected to increase by 108 percent, vehicle trips by 110 percent and vehicle miles traveled by 108 percent. Table I-4 illustrates the growth anticipated in Scenario I.

Table I-4

DEMOGRAPHIC AND TRAVEL CHARACTERISTICS: SCENARIO I  
(Numbers in thousands)

|                        | 1976   | 1985   | Growth<br>76-85 | Scenario I | Growth<br>76-Scenario I |
|------------------------|--------|--------|-----------------|------------|-------------------------|
| <u>Orange County</u>   |        |        |                 |            |                         |
| Population             | 1,722  | 2,175  | 26%             | 2,596      | 51%                     |
| Jobs                   | 622    | 1,030  | 65%             | 1,250      | 101%                    |
| Total Person Trips     | 4,494  | 7,187  | 60%             | 9,364      | 108%                    |
| Vehicle Trips          | 3,313  | 5,292  | 60%             | 6,946      | 110%                    |
| Vehicle Miles Traveled | 28,442 | 43,986 | 53%             | 58,223     | 108%                    |
| <u>Study Area*</u>     |        |        |                 |            |                         |
| Population             | 3,030  | 3,593  | 19%             | 4,104      | 35%                     |
| Jobs                   | 1,150  | 1,625  | 41%             | 1,875      | 63%                     |
| Total Person Trips     | 7,781  | 10,843 | 39%             | 13,469     | 73%                     |
| Vehicle Trips          | 7,599  | 10,114 | 33%             | 12,133     | 60%                     |
| Vehicle Miles Traveled | 53,321 | 72,767 | 35%             | 89,647     | 60%                     |

\* MMTS Study Area: Orange County and portions of Los Angeles and Riverside Counties

The Scenario I transportation system requirements are depicted on Map I-7. The map illustrates all corridors that would be required for the level of urbanization presented in Scenario I. It should be noted that most of these corridors already exist. However, travel demand would require increased capacity for both highway and transit within the existing corridors. All of the corridors depicted on the map are on the current Master Plan of Arterial Highways component of the Transportation Element and would need to be improved to their adopted classification. Increased capacity would be required on all existing freeways and selected state highways. Development of recommended transit improvements would also be required.

Significantly more growth is projected for the northwestern portion of the county in Scenario II than is the case for Scenario I. The southern portion of the county remains largely unchanged between the two scenarios, although there is a slight increase in population and employment in Scenario II.

The intensification of development in the northwestern portion of the county will require expansion of the transportation system proposed in Scenario I because of a substantial increase in travel demand. There will be an increased demand for transit since it would be more efficient in areas with increased residential and employment densities. The major addition to the system will be a connection between the Costa Mesa Freeway and the Eastern and Foothill Transportation Corridors (see Link A on Map I-8). This connection will mitigate some of the congestion projected for the system in that area.

The development patterns in the northwestern portion of the county are very similar in Scenarios II and III, with a slight intensification of urban activity in Scenario III. Significantly more growth, however, is projected for the southern portion of the county in Scenario III. Ranches located in the eastern and southern parts of the county are assumed to be developed with urban and suburban densities.

The assumed intensification in South County and the previously discussed urbanization of the northwestern part of the county would require expansion of the transportation system proposed in Scenario II. There will be a substantial increase in travel demand in all portions of the county. The demand for northwest/southeast travel will increase, requiring an expressway-type facility along Santiago Canyon Road running parallel to the Foothill Corridor, connecting with the Costa Mesa Freeway (see Links C and D on Map I-9). An extension of the Laguna Freeway to the Foothill Corridor would also be beneficial (see Link B on Map I-9). There will be increased demand for transit throughout Northwest County and along corridors providing access to South County. The projected employment for the city of Irvine and the regional activity centers of Northwest County (stretching from Newport Center to Anaheim) may encourage innovative transit solutions to resolve significant congestion problems.

#### Air Quality Analysis

Air quality planning in the South Coast Air Basin is done within the context of the South Coast Air Quality Management Plan (AQMP). The AQMP was jointly

# Scenario One

 Transportation  
Corridors





## Scenario Two

 Transportation  
Corridors



MAP I-8

# Scenario Three

 Transportation  
Corridors





published in January 1979 by the Southern California Association of Governments and the South Coast Air Quality Management District.

The AQMP, in accordance with the federal guidelines for implementing the Clean Air Act Amendments of 1977, calls for a graduated decrease in air pollution emissions to a level that will permit attainment of the National Ambient Air Quality Standards. Because it is technically difficult to forecast ambient air quality, this analysis was performed on the basis of emission (tons) rather than concentrations (parts per million).

Air pollutant emissions are generally grouped in to three source categories: stationary, mobile and natural. Mobile source emissions are divided into on-road and off-road subcategories. On-road sources are licensed motor vehicles operating on the public road system, including motorcycles; automobiles; light, medium, and heavy-duty trucks. This air quality analysis estimates the pollutant emissions from these vehicle types.

There are five major air pollutants emitted by motor vehicles: carbon monoxide (CO), hydrocarbons (HC), oxides of nitrogen (NOx), oxides of sulfur (SOx), and total suspended particulates (TSP). Emission inventories, both current and projected, are maintained for each of these pollutants by the South Coast Air Quality Management District. Gasoline engines account for the majority of on-road CO, NOx, and HC, while diesel buses and trucks account for most of the SOx and TSP.

Carbon monoxide, by weight and volume the most common air pollutant in the South Coast Air Basin, is a product of the combustion of organic compounds, including wood, coal, and hydrocarbon-based fuels. It is a colorless, odorless, tasteless gas that is slightly lighter than air. CO acts as a poison by interfering with the blood's ability to carry oxygen and transfer it to other tissues. In order to present a clear threat to human life, CO needs to be highly concentrated under very stagnant air conditions. In the case of transportation facilities, such stagnant air is extremely rare.

Hydrocarbons emissions, in and of themselves, are not generally regarded as a health hazard. Methane accounts for a significant portion of total hydrocarbon emissions. Because it is rather inactive chemically, it is of little importance to air pollution analysis. The remaining hydrocarbons are chemically reactive and are important precursors to photochemical smog. Hydrocarbon emissions result from the incomplete combustion and evaporation of hydrocarbon-based fuels such as gasoline.

Oxides of nitrogen emissions result from high-temperature combustion of fossil fuels. Accordingly, the high-speed internal combustion engine contributes heavily to NOx emissions, as do various industrial facilities (stationary sources). Nitric oxide (NO) is the most prevalent form of such emissions, while other oxides, (NO2 and NO3) are formed by chemical oxidation of the lower-order nitric oxide. Like reactive hydrocarbons, oxides of nitrogen are important ingredients in the formation of photochemical smog, and hence are important to air quality analysis. Nitrogen dioxide (NO2) is the most toxic pollutant in this group; it has been shown to contribute to respiratory problems and, in high concentrations, can be fatal as a result of pulmonary edema (swelling and degeneration of lung tissues).



Sulfur oxides are also a product of combustion. Among on-road sources, diesel trucks and buses are the main contributor because of the combustion characteristics and sulfur content of diesel fuel. The species of concern is sulfur dioxide (SO<sub>2</sub>). It is a non-flammable, colorless gas that has a pungent odor. By chemical reaction, sulfur dioxide plays a role in the formation of various sulfate compounds including, under the correct atmospheric conditions, a sulfuric acid mist. Low-sulfur fuels have tended to reduce the impact of motor vehicles as a source of sulfur oxides pollution. Particulate matter in the atmosphere consists of soot, dust, aerosols, fumes, and mists. Mobile sources represent a small fraction of the total of these pollutants. Of the on-road sources, trucks and buses are the largest contributors.

As stated above, the three most relevant emission species in a transportation analysis are carbon monoxide, reactive hydrocarbons, and oxides of nitrogen. It is important to examine the behavior of these types of emissions with respect to the operation of road systems. Carbon monoxide and reactive hydrocarbon emissions are related to the engine's air-to-fuel ratio; that is, they decrease as fuel is burned more efficiently, and beyond the point of maximum efficiency, continue to decrease as engine speed increases. Therefore, as delay is reduced and operating speeds increase in a given transportation network, these kinds of emissions are lessened. Oxides of nitrogen, however, behave somewhat differently. NO<sub>x</sub> is formed during high temperature combustion; as the combustion rate (i.e., engine speed) increases, the rate of formation of NO<sub>x</sub> increase slightly. Therefore, improved transportation network speeds result in somewhat higher emission levels of NO<sub>x</sub>. However, since the marginal decreases in hydrocarbon emission rates are much greater than the corresponding changes in NO<sub>x</sub> emission rates, the general conclusion is that higher transportation system speeds are beneficial to air quality.

The projected vehicle fleet mix used to compute the emission factors used in this analysis is as follows:

|                              |        |
|------------------------------|--------|
| Passenger Cars               | 80.4%  |
| Light-Duty Trucks            | 12.1%  |
| Medium-Duty Trucks           | 1.4%   |
| Heavy-Duty Trucks (gasoline) | 2.5%   |
| Heavy-Duty Trucks (diesel)   | 2.5%   |
| Motorcycles                  | 1.1%   |
| Total                        | 100.0% |

This fleet mix was derived by the California Department of Transportation (District 7) and is currently being used for all regional air quality studies in the South Coast Air Basin.

Table 1-5

## AIR POLLUTANT EMISSIONS\*

(Tons Per Day)

| Orange County      | Scenario I | Scenario II | Scenario III |
|--------------------|------------|-------------|--------------|
| Carbon Monoxide    | 1,067      | 1,207       | 1,348        |
| Hydrocarbons       | 137        | 159         | 177          |
| Oxides of Nitrogen | 97         | 107         | 117          |
| Sulfur Oxides      | 14         | 15          | 17           |
| Particulates       | 20         | 23          | 25           |
| Study Area         |            |             |              |
| Carbon Monoxide    | 1,688      | 1,853       | 2,018        |
| Hydrocarbons       | 216        | 244         | 266          |
| Oxides of Nitrogen | 153        | 165         | 175          |
| Sulfur Oxides      | 21         | 24          | 25           |
| Particulates       | 32         | 35          | 37           |

\*Results from BURDEN6 model with South Orange County Circulation Study (SOCCS) input.

Higher levels of emissions (tons/day) can be anticipated as vehicle miles traveled (VMT), vehicle hours traveled (VHT) and delay time increase. Scenario III represents the greatest amount of urbanization (531 square miles) and, therefore, has the highest level of emissions. Levels of emissions for Scenario I are the lowest of the three scenarios. Table I-5 illustrates the emissions levels for each scenario.

Emissions from motor vehicles are given in tons of pollutant emitted per day for each of the five species. There is no direct conversion between emissions in tons per day and pollutant concentration in parts per million (ppm). Therefore, vehicular emissions cannot be readily compared to the species concentrations required by the National Ambient Air Quality Standards (NAAQS). Nonetheless, the Southern California Association of Governments (SCAG) was required for the Air Quality Management Plan (AQMP) to estimate emissions levels that must be obtained to meet the NAAQS. In an attempt to relate tons of emissions to pollutant concentrations, SCAG has used computerized air quality models. SCAG's models predict that at the emissions levels projected for the South Coast Air Basin will not meet the current NAAQS by 1987.

The emissions projected by the SCAG-82A growth forecast for Orange County in the year 2000 fall between the emissions calculated for Scenarios I and II. However, because the South Coast Air Basin does not meet the NAAQS with SCAG's projections, this comparison does not have any specific implications. In addition, the Clean Air Act is undergoing revision. It is probable that the standards will be relaxed. A comparison to the standards at the end of the revision process would be more meaningful.



## CHAPTER THREE: GOALS

### A. Overview

This section of Component I describes the long-range goals that guide the land planning decision-making process.

The goals are the third section of Component I of the planning program. A summary of the new planning program and the three growth scenarios comprise the first two sections of this component. In its entirety, Component I provides the long-range framework for the County Advance Planning Program. While there is no direct relationship among the sections of this component, the common theme between them is to guide the long-range growth expectancy for the county. The three growth scenarios are the focus of Component I. All the growth scenarios promote the attainment of the goals contained herein.

The three components of the planning program provide the advance planning perspective of the County from a general level to a specific and detailed level. Each component consists of a written text. The Component I text consists of the long-range goals contained herein. The text of Component II consists of mid-range objectives, policies and programs derived in part from these goals. The text promotes the attainment of the goals of Component I and represents the County's commitment to them. The text of Component III consists of short-range objectives, policies, and programs that implement those of Component II. Just as the assumptions and growth policies of each component progress from long to short range, the policy statements progress from long-range goals in Component I to short-range policies in Component III. To summarize this pyramidal structure, goals provide the general long-range planning framework. They are promoted by objectives, policies and programs, which guide planning activity and represent a commitment to the goals.

### B. Framework for the Goals

Goals represent qualitative statements of the ultimate purpose of planning efforts. Goals are descriptions of ideal conditions that are constantly being pursued but are not always attainable.

The goals contained in this section were compiled from existing General Plan elements and are categorized under the following subject area headings: Land Use, Transportation, Housing, Noise, Recreation, Resources, and Safety. Goal statements are underlined and are followed by a brief explanation and statement of intent.

Goals are grouped under the headings of "general" and "specific". All subject areas have one general goal. The general goals represent a planning purpose having wide applicability and comprehensive scope. They are inter-related and may be cross-listed within the subject areas as furthering the aim of promoting the public health, safety, and welfare. Specific goals are supportive corollaries of the general goals with focused purposes tied directly to the individual subject areas.

Affordable housing is a goal of the highest priority. The provision of an adequate supply of housing, both rental and for-sale, that is within the financial means of the labor force is essential to the economic health of the county. Progress toward the goal of ensuring the availability of affordable housing goes hand in hand with other goals, however, such as balanced land use, efficient utilization of the transportation system, the attainment of regional air quality standards, resource conservation and the maintenance of environmental quality.

### C. Land Use Goals

Land Use goals promote the logical and orderly distribution, location and extent of all categories of public and private uses of land including residential, commercial, industrial, open space, and public facilities.

It is the general goal of the County of Orange to:

Protect and enhance living conditions through the harmonious blending of the man-made and natural environments in order to achieve optimum levels of air and water quality.

The purpose of this goal is to state that the ultimate condition of the county will be a mixture of development and undeveloped open space such that development objectives are balanced with air and water quality objectives.

The specific goals of the County of Orange are to:

1. Plan for a balanced mix of residential, industrial, commercial and public land uses.

The purpose of this goal is to provide for communities that are balanced in terms of housing, employment, recreational, cultural, and open space opportunities. Such communities could reduce auto travel, enhance transit usage, and offer a wider variety of services and experiences.

2. Provide for a choice of residential communities that fosters the growth of commercial, industrial and public service areas, all within reasonably close proximity of each other.

The purpose of this goal is to provide residents with a variety of housing opportunities near employment, commercial and government uses. Again, such communities could reduce auto travel and enhance transit use.

3. Plan for an urbanized county that retains a significant amount of open space land for active and passive recreational uses, as well as for resource conservation and extraction.

The purpose of this goal is to balance housing and employment development with the preservation of natural resources and significant open space areas.

4. Support land acquisition/dedication and public facilities development by the County to meet the needs of present and future residents.

The purpose of this goal is to promote acquisition of land adequate to ensure that the County can provide the necessary public services for the health and welfare of its residents.

#### D. Transportation Goals

Transportation goals provide for the logical and orderly planning of highway, bikeway, and aviation facilities in coordination with rail and transit systems planning by other agencies; and the development, establishment, and protection of scenic highways.

It is the general goal of the County of Orange to:

Develop an integrated transportation system consisting of a blend of transportation modes capable of meeting the need to move people and goods by private and public means with maximum efficiency, convenience, economy, safety and comfort; and a system that is consistent with other goals and values of the County and the region.

The purpose of this goal is to promote the development of an effective and efficient transportation system utilizing and integrating all modes to the fullest practical extent.

The specific goals of the County of Orange are to:

1. Plan for an arterial highway system that provides for the demand-generating needs of the land use policies of the County and cities and the safe, convenient, and efficient movement of people and goods, while conforming to applicable environmental quality standards of the County.

The purpose of this goal is to ensure an adequate roadway capacity, phased and built in coordination with development.

2. Increase the mobility of county residents through transit and ridesharing options by encouraging effective levels of transit services designed to increase the attractiveness and reliability of transit to the general public in Orange County.

The purpose of this goal is to encourage consideration of transit in arterial and freeway system planning.

3. Plan for an integrated system of bikeways throughout the county that meets both recreation and transportation needs.

The purpose of this goal is to promote an integrated system of bikeways that would permit the use of bicycles for both recreation and transportation.



4. Plan for the protection of unique or especially valuable aesthetic, historical, or cultural resources through sensitive highway design and through the regulation of development within scenic corridors.

The purpose of this goal is to promote the protection of valuable resources in scenic corridors through highway planning programs and land use regulations.

#### E. Housing Goals

These goals promote policies that will help to meet the housing needs of all segments of the community in pursuit of the goal of a decent home and a suitable living environment for all residents.

It is the general goal of the County of Orange to:

Provide decent and adequate housing with respect to selection by type, price and tenure in a satisfying environment for all persons regardless of age, race, sex, marital status, ethnic background, source of income or other factors.

This goal promotes the provision of a wide variety of housing opportunities to meet the needs of all segments of the community.

The specific goals of the County of Orange are to:

1. Develop a balanced residential environment characterized by clean air, quiet and pleasant surroundings, and reasonable assurances of safety and security within easy access of employment opportunities, community facilities and services where an individual may develop a sense of identity and belonging, and satisfy physical, cultural and economic needs.

This goal establishes the place of residence not just as shelter but as part of an integrated community in which a person could obtain most basic needs. This goal relates to transportation and land use goals promoting balanced communities.

2. Promote countywide and regional coordination of housing, community and economic development activities with private sector and citizen group involvement.

The purpose of this goal is to promote intergovernmental coordination in meeting regional housing needs. In addition, coordination is also encouraged between government and the development industry in order to achieve housing needs.

#### F. Recreation Goals

Recreation goals provide for the development of a comprehensive system of sites for recreation including the location and development of natural

reservations, parks, parkways, beaches, playgrounds, recreational community gardens, and other recreation areas.

It is the general goal of the County of Orange to:

Provide adequate facilities and opportunities for the leisure time and recreation needs of the county's residents.

The purpose of this goal is to provide a comprehensive level of planning with respect to overall recreational needs.

The specific goals of the County of Orange are to:

1. Provide for a regional park system with recreation facilities designed to meet the diverse recreation interests of existing and future residents of the county.
2. Provide for a local park system with recreation facilities designed to meet the recreation needs of existing and developing communities within the unincorporated areas of the county.
3. Provide regional and local park facilities (through dedication and development; and through fees, respectively) that serve recreation needs of the county as a whole.

The purpose of these goals is the same: to provide and maintain parks that are adequate to meet a broad spectrum of recreation needs. Only the scale of the goals is different (i.e., county-wide as compared to local).

4. Provide a useful and efficient regional riding and hiking trail system to meet the recreation needs and desires of the citizens of the entire county by: (1) emphasizing trail linkage opportunities between open space and recreation facilities and equestrian communities throughout the county; (2) planning and designing trails for minimum maintenance; and (3) providing efficient operation and maintenance programs.

The purpose of this goal is to promote planning for the equestrian and hiking needs of county's population.

#### G. Noise Goals

These goals seek to protect the community from noise impacts that would jeopardize its health and welfare.

It is the general goal of the County of Orange to:

Protect the health, safety and general welfare of county residents by reducing noise levels and establishing compatible land uses in noise-impacted areas.

This goal promotes the amelioration of noise impacts by both reducing the sources of noise and by guiding land uses so they are compatible with ambient noise levels.

It is the specific goal of the County of Orange to:

Generally restrict residential and other noise-sensitive uses from areas subject to consistently high noise levels, and identify and employ mitigation measures to reduce the impact of noise levels where physical location restrictions are not possible.

The purpose of this goal is to ensure that residential and other noise-sensitive uses are located away from significant noise sources. When such separation is not possible, this goal promotes establishment of methods of reducing the noise impact to acceptable levels.

#### H. Resource Goals

Resource goals are prepared for the conservation and development of natural resources including, but not limited to, water, forests, significant open space areas, cultural-historic resources, soils, rivers and other waters, harbors, fisheries, wildlife, animals, fossil fuels, extractive minerals, solar, nuclear, and recycled sources of energy.

It is the general goal of the County of Orange to:

Conserve the natural resources of the county by effectively managing their use or, where appropriate, simultaneously protecting them for the use of future residents.

The purpose of this goal is to preserve resources for their optimal future use.

The specific goals of the County are to:

1. Plan for protection of unique and other significant landforms, cultural-historic resources, as well as wildlife and vegetation resources, and to promote development that considers and, where appropriate, preserves these environmental and scientific resources.

This goal promotes the preservation of aesthetic and environmental resources, as well as commercial resources.

2. Promote conservation of all physically managed resources, including water, open space areas, minerals and fossil fuels in a manner consistent with sound ecological management principles.

This goal promotes a balance in the preservation of aesthetic, environmental and commercial resources with the development needs of the county.

#### I. Safety Goals

Safety goals are provided for the protection of the county's population from fire, flood and geological hazards. Geological hazards include those attributed to seismic activity such as surface ruptures, tsunamis, seiches, mudslides, landslides, and slope instability (whether or not related to



seismic activity). Fire hazards include those associated with wildlands as well as developed areas. Flood hazards are those associated with injury and property damage caused by inundation.

It is the general goal of the County to:

Provide for every resident of the county while at work, at home, or any other location within the the county, an environment that is safe and secure from natural and man-made hazards.

The purpose of this goal is to promote a safe living environment that is free from environmental and man-made hazards.

The specific goals of the County are to:

1. Provide a safe living environment consistent with available resources required to identify and provide policies to control natural seismic and geological, flood and structural, and wildland fire hazards.
2. Identify hazards and hazard areas, and provide information to determine the relative risk to people and property in the county.

The purpose of this goal is to provide for a commonly understandable means of evaluating hazard potential.

3. Plan for training and disaster assistance in the event of fire, flood, or geologic hazard disaster.

The purpose of these goals is to make residential, employment, and recreational areas as safe as possible from fire, flood, or seismic hazards. If such events occur, a mechanism must be available to effectively react to the situation.



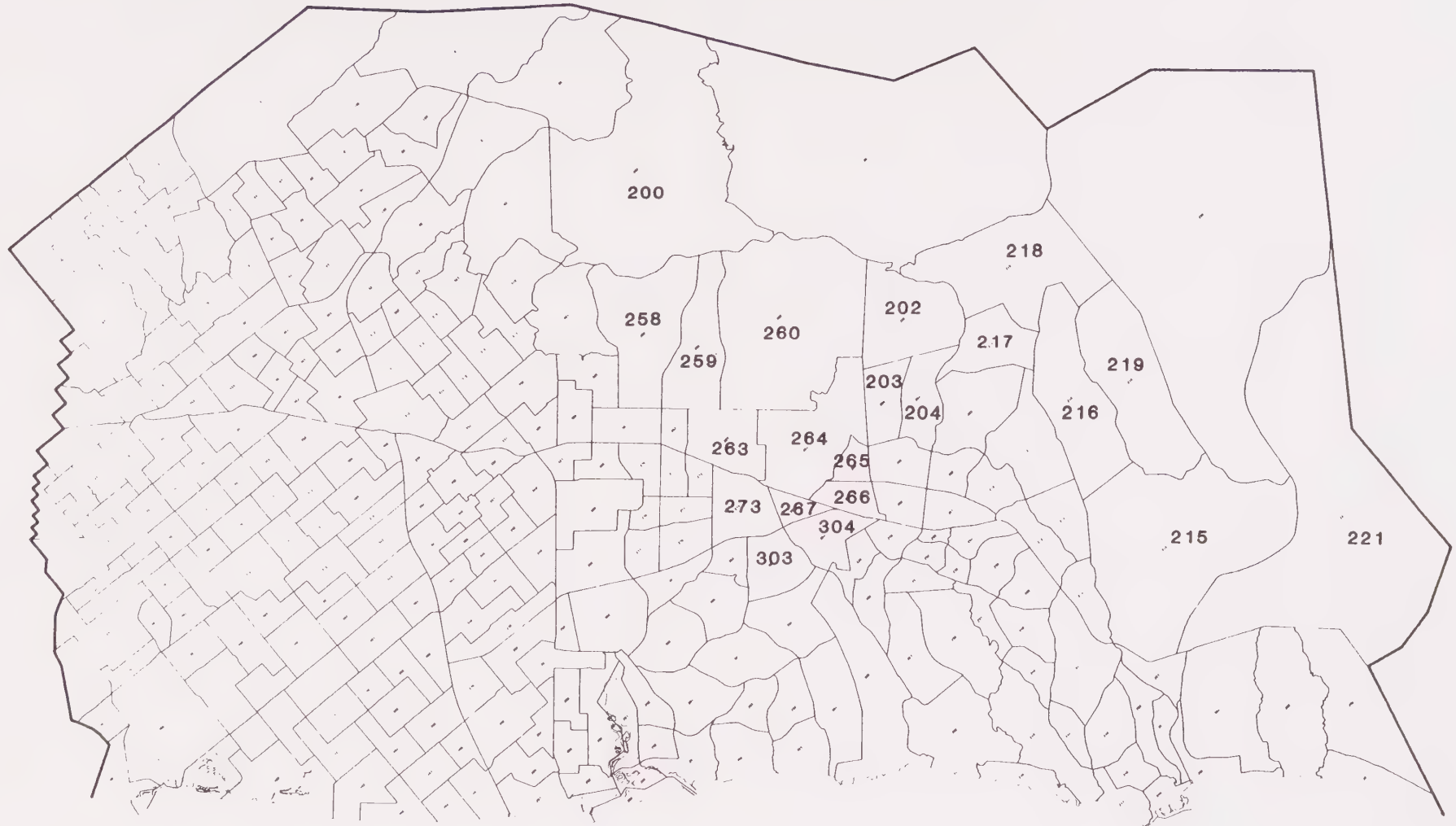
APPENDIX A





TABLE A-1  
AUGMENTED MMTS ZONE SOCIO-ECONOMIC DATA

| <u>MMTS<br/>ZONE</u>   | <u>OCCUPIED<br/>DWELLING UNITS</u> | <u>POPULATION</u> | <u>TOTAL EMPLOYMENT</u> |
|------------------------|------------------------------------|-------------------|-------------------------|
| <u>Augmented Zones</u> |                                    |                   |                         |
| 200                    | 10,377                             | 25,943            | 3,671                   |
| 202                    | 5,404                              | 15,188            | 9,356                   |
| 203                    | 3,637                              | 10,186            | 9,877                   |
| 204                    | 2,730                              | 7,643             | 4,829                   |
| 215                    | 16,699                             | 49,557            | 15,084                  |
| 216                    | 16,073                             | 45,004            | 17,544                  |
| 217                    | 5,840                              | 16,353            | 1,192                   |
| 218                    | 2,376                              | 7,071             | 1,100                   |
| 219                    | 5,127                              | 14,356            | 817                     |
| 221                    | 19,314                             | 54,174            | 15,467                  |
| 258                    | 25,688                             | 64,220            | 2,416                   |
| 259                    | 16,112                             | 40,280            | 1,326                   |
| 260                    | 22,525                             | 63,313            | 2,260                   |
| 263                    | 9,096                              | 27,200            | 10,767                  |
| 264                    | 1,107                              | 8,534             | 4,000                   |
| 265                    | 0                                  | 0                 | 19,568                  |
| 266                    | 0                                  | 0                 | 26,893                  |
| 267                    | 0                                  | 0                 | 25,802                  |
| 273                    | 14,925                             | 37,313            | 6,907                   |
| 303                    | 3,605                              | 9,013             | 507                     |
| 304                    | 1,180                              | 2,950             | 7,428                   |



**MMTS/TAZ**

METROPOLITAN MULTIMODAL TRANSPORTATION STUDY TRANSPORTATION ANALYSIS ZONES



APPENDIX B



TABLE B-1

RSA 35-J  
(NUMBERS IN THOUSANDS)

| POPULATION<br>(POP)<br>DWELLING<br>UNITS (DU) | 1980 |      | I     |     | II    |      | III   |      |
|---|------|------|-------|-----|-------|------|-------|------|
|   | POP  | DU   | POP   | DU  | POP   | DU   | POP   | DU   |
| TOTAL   | 157  | 53   | 172   | 62  | 199   | 71   | 199   | 71   |
| % OF COUNTY TOTAL                             | 8.1% | 7.4% | 6.7%  | 6%  | 6.6%  | 5.9% | 6.1%  | 5.4% |
| CHANGE*                                       | -    | -    | 15    | 9   | 42    | 18   | 42    | 18   |
| % CHANGE**                                    | -    | -    | 9.6%  | 17% | 26.8% | 34%  | 26.8% | 34%  |
| EMPLOYMENT                                    | 1980 |      | I     |     | II    |      | III   |      |
| TOTAL   | 57   |      | 66    |     | 74    |      | 81    |      |
| % OF COUNTY TOTAL                             | 6%   |      | 5.3%  |     | 5.1%  |      | 5.1%  |      |
| CHANGE*                                       | -    |      | 9     |     | 17    |      | 24    |      |
| % CHANGE**                                    | -    |      | 15.8% |     | 29.8% |      | 42.1% |      |

TABLE B-2

RSA 36-A  
(NUMBERS IN THOUSANDS)

| POPULATION<br>(POP)<br>DWELLING<br>UNITS (DU) | 1980  |    | I     |       | II    |      | III   |     |
|---|-------|----|-------|-------|-------|------|-------|-----|
|   | POP   | DU | POP   | DU    | POP   | DU   | POP   | DU  |
| TOTAL   | 169   | 65 | 201   | 76    | 240   | 91   | 240   | 91  |
| % OF COUNTY TOTAL                             | 8.7%  | 9% | 7.8%  | 7.3%  | 8%    | 7.5% | 7.4%  | 7%  |
| CHANGE*                                       | -     | -  | 32    | 11    | 71    | 26   | 71    | 26  |
| % CHANGE**                                    | -     | -  | 18.9% | 16.9% | 42%   | 40%  | 42%   | 40% |
| EMPLOYMENT                                    | 1980  |    | I     |       | II    |      | III   |     |
| TOTAL   | 116   |    | 137   |       | 157   |      | 162   |     |
| % OF COUNTY TOTAL                             | 12.3% |    | 11%   |       | 10.8% |      | 10.2% |     |
| CHANGE*                                       | -     |    | 21    |       | 41    |      | 46    |     |
| % CHANGE**                                    | -     |    | 18.1% |       | 35.3% |      | 39.7% |     |

1980 BASE FIGURES WERE TAKEN FROM 1980 CENSUS DATA.

\* CHANGE IS DETERMINED BY SCENARIO - 1980 .

\*\* % CHANGE IS DETERMINED BY SCENARIO - 1980

1980

I-B-1



TABLE B-3

RSA 37-H  
(NUMBERS IN THOUSANDS)

| POPULATION<br>(POP)<br>DWELLING<br>UNITS (DU) | 1980  |       | I     |       | II    |       | III   |       |
|---|-------|-------|-------|-------|-------|-------|-------|-------|
|   | POP   | DU    | POP   | DU    | POP   | DU    | POP   | DU    |
| TOTAL   | 339   | 125   | 381   | 153   | 451   | 176   | 451   | 176   |
| % OF COUNTY TOTAL                             | 17.5% | 17.3% | 14.8% | 14.7% | 15%   | 14.6% | 13.9% | 13.5% |
| CHANGE*                                       | -     | -     | 42    | 28    | 112   | 51    | 112   | 51    |
| % CHANGE**                                    | -     | -     | 12.4% | 22.4% | 33%   | 40.8% | 33%   | 40.8% |
| EMPLOYMENT                                    | 1980  |       | I     |       | II    |       | III   |       |
| TOTAL   | 166   |       | 180   |       | 211   |       | 211   |       |
| % OF COUNTY TOTAL                             | 17.6% |       | 14.4% |       | 14.5% |       | 13.3% |       |
| CHANGE*                                       | -     |       | 14    |       | 45    |       | 45    |       |
| % CHANGE**                                    | -     |       | 8.4%  |       | 27.1% |       | 27.1% |       |

TABLE B-4

RSA 38-1  
(NUMBERS IN THOUSANDS)

| POPULATION<br>(POP)<br>DWELLING<br>UNITS (DU) | 1980  |       | I     |       | II    |     | III   |     |
|---|-------|-------|-------|-------|-------|-----|-------|-----|
|   | POP   | DU    | POP   | DU    | POP   | DU  | POP   | DU  |
| TOTAL   | 321   | 119   | 356   | 148   | 405   | 169 | 405   | 169 |
| % OF COUNTY TOTAL                             | 16.6% | 16.5% | 13.9% | 14.2% | 13.5% | 14% | 12.5% | 13% |
| CHANGE*                                       | -     | -     | 35    | 29    | 84    | 50  | 84    | 50  |
| % CHANGE**                                    | -     | -     | 10.9% | 24.4% | 26.2% | 42% | 26.2% | 42% |
| EMPLOYMENT                                    | 1980  |       | I     |       | II    |     | III   |     |
| TOTAL   | 93    |       | 122   |       | 125   |     | 137   |     |
| % OF COUNTY TOTAL                             | 9.9%  |       | 9.8%  |       | 8.6%  |     | 8.7%  |     |
| CHANGE*                                       | -     |       | 29    |       | 32    |     | 44    |     |
| % CHANGE**                                    | -     |       | 32.2% |       | 34.4% |     | 47.3% |     |

1980 BASE FIGURES WERE TAKEN FROM 1980 CENSUS DATA.

\* CHANGE IS DETERMINED BY SCENARIO - 1980 .

\*\* % CHANGE IS DETERMINED BY SCENARIO - 1980

1980

TABLE B-5

RSA 39-F  
(NUMBERS IN THOUSANDS)

| POPULATION<br>(POP)<br>DWELLING<br>UNITS (DU) | 1980 |       | I     |       | II    |       | III   |       |
|---|------|-------|-------|-------|-------|-------|-------|-------|
|   | POP  | DU    | POP   | DU    | POP   | DU    | POP   | DU    |
| TOTAL   | 172  | 75    | 264   | 115   | 294   | 128   | 294   | 128   |
| % OF COUNTY TOTAL                             | 8.9% | 10.4% | 10.3% | 11.1% | 9.8%  | 10.6% | 9%    | 9.8%  |
| CHANGE*                                       | -    | -     | 92    | 40    | 122   | 53    | 122   | 53    |
| % CHANGE**                                    | -    | -     | 53.5% | 53.3% | 70.9% | 70.7% | 70.9% | 70.7% |
| EMPLOYMENT                                    | 1980 |       | I     |       | II    |       | III   |       |
| TOTAL   | 141  |       | 162   |       | 175   |       | 187   |       |
| % OF COUNTY TOTAL                             | 15%  |       | 13%   |       | 12%   |       | 11.8% |       |
| CHANGE*                                       | -    |       | 21    |       | 34    |       | 46    |       |
| % CHANGE**                                    | -    |       | 14.9% |       | 24.1% |       | 32.6% |       |

TABLE B-6

RSA 40-D  
(NUMBERS IN THOUSANDS)

| POPULATION<br>(POP)<br>DWELLING<br>UNITS (DU) | 1980 |      | I      |       | II     |       | III   |       |
|---|------|------|--------|-------|--------|-------|-------|-------|
|   | POP  | DU   | POP    | DU    | POP    | DU    | POP   | DU    |
| TOTAL   | 135  | 66   | 241    | 117   | 253    | 123   | 265   | 129   |
| % OF COUNTY TOTAL                             | 7%   | 9.2% | 9.4%   | 11.2% | 8.4%   | 10.2% | 8.2%  | 9.9%  |
| CHANGE*                                       | -    | -    | 106    | 51    | 118    | 57    | 130   | 63    |
| % CHANGE**                                    | -    | -    | 78.5%  | 77.3% | 87.4%  | 86.4% | 96.3% | 95.5% |
| EMPLOYMENT                                    | 1980 |      | I      |       | II     |       | III   |       |
| TOTAL   | 33   |      | 84     |       | 91     |       | 99    |       |
| % OF COUNTY TOTAL                             | 3.5% |      | 6.7%   |       | 6.2%   |       | 6.3%  |       |
| CHANGE*                                       | -    |      | 51     |       | 58     |       | 66    |       |
| % CHANGE**                                    | -    |      | 154.5% |       | 175.8% |       | 200%  |       |

1980 BASE FIGURES WERE TAKEN FROM 1980 CENSUS DATA.

\* CHANGE IS DETERMINED BY SCENARIO - 1980 .

\*\* % CHANGE IS DETERMINED BY SCENARIO - 1980

1980

TABLE B-7

RSA 41-B  
(NUMBERS IN THOUSANDS)

| POPULATION<br>(POP)<br>DWELLING<br>UNITS (DU) | 1980 |      | I     |       | II   |        | III   |        |
|---|------|------|-------|-------|------|--------|-------|--------|
|   | POP  | DU   | POP   | DU    | POP  | DU     | POP   | DU     |
| TOTAL   | 117  | 39   | 200   | 76    | 220  | 84     | 225   | 85     |
| % OF COUNTY TOTAL                             | 6.1% | 5.4% | 7.8%  | 7.3%  | 7.3% | 7%     | 6.9%  | 6.5%   |
| CHANGE*                                       | -    | -    | 83    | 37    | 103  | 45     | 108   | 46     |
| % CHANGE**                                    | -    | -    | 70.9% | 94.9% | 88%  | 115.4% | 92.3% | 117.9% |
| EMPLOYMENT                                    | 1980 |      | I     |       | II   |        | III   |        |
| TOTAL   | 50   |      | 89    |       | 109  |        | 114   |        |
| % OF COUNTY TOTAL                             | 5.3% |      | 7.1%  |       | 7.5% |        | 7.2%  |        |
| CHANGE*                                       | -    |      | 39    |       | 59   |        | 64    |        |
| % CHANGE**                                    | -    |      | 78%   |       | 118% |        | 128%  |        |

TABLE B-8

RSA 42-G  
(NUMBERS IN THOUSANDS)

| POPULATION<br>(POP)<br>DWELLING<br>UNITS (DU) | 1980  |     | I     |       | II    |       | III   |       |
|---|-------|-----|-------|-------|-------|-------|-------|-------|
|   | POP   | DU  | POP   | DU    | POP   | DU    | POP   | DU    |
| TOTAL   | 377   | 130 | 434   | 175   | 506   | 204   | 506   | 204   |
| % OF COUNTY TOTAL                             | 19.5% | 18% | 16.9% | 16.8% | 16.9% | 16.9% | 15.6% | 15.7% |
| CHANGE*                                       | -     | -   | 57    | 45    | 129   | 74    | 129   | 74    |
| % CHANGE**                                    | -     | -   | 15.1% | 34.6% | 34.3% | 56.9% | 34.2% | 56.9% |
| EMPLOYMENT                                    | 1980  |     | I     |       | II    |       | III   |       |
| TOTAL   | 219   |     | 255   |       | 314   |       | 314   |       |
| % OF COUNTY TOTAL                             | 23.2% |     | 20.4% |       | 21.5% |       | 19.9% |       |
| CHANGE*                                       | -     |     | 36    |       | 95    |       | 95    |       |
| % CHANGE**                                    | -     |     | 16.4% |       | 43.4% |       | 43.4% |       |

1980 BASE FIGURES WERE TAKEN FROM 1980 CENSUS DATA.

\* CHANGE IS DETERMINED BY SCENARIO - 1980 .

\*\* % CHANGE IS DETERMINED BY SCENARIO - 1980

1980



TABLE B-9

RSA 43-C  
(NUMBERS IN THOUSANDS)

| POPULATION<br>(POP)<br>DWELLING<br>UNITS (DU) | 1980 |      | I      |       | II     |        | III    |        |
|---|------|------|--------|-------|--------|--------|--------|--------|
|   | POP  | DU   | POP    | DU    | POP    | DU     | POP    | DU     |
| TOTAL   | 93   | 32   | 169    | 58    | 193    | 66     | 339    | 122    |
| % OF COUNTY TOTAL                             | 4.8% | 4.4% | 6.6%   | 5.6%  | 6.4%   | 5.5%   | 10.4%  | 9.4%   |
| CHANGE*                                       | -    | -    | 76     | 26    | 100    | 34     | 246    | 90     |
| % CHANGE**                                    | -    | -    | 81.7%  | 81.2% | 107.5% | 106.5% | 264.5% | 281.2% |
| EMPLOYMENT                                    | 1980 |      | I      |       | II     |        | III    |        |
| TOTAL   | 18   |      | 39     |       | 53     |        | 106    |        |
| % OF COUNTY TOTAL                             | 1.9% |      | 3.1%   |       | 3.6%   |        | 6.7%   |        |
| CHANGE*                                       | -    |      | 21     |       | 35     |        | 88     |        |
| % CHANGE**                                    | -    |      | 116.7% |       | 194.4% |        | 488.9% |        |

TABLE B-10

RSA 44-E  
(NUMBERS IN THOUSANDS)

| POPULATION<br>(POP)<br>DWELLING<br>UNITS (DU) | 1980 |      | I      |       | II     |        | III    |      |
|---|------|------|--------|-------|--------|--------|--------|------|
|   | POP  | DU   | POP    | DU    | POP    | DU     | POP    | DU   |
| TOTAL   | 53   | 17   | 152    | 60    | 239    | 94     | 326    | 128  |
| % OF COUNTY TOTAL                             | 2.7% | 2.4% | 5.9%   | 5.8%  | 8%     | 7.8%   | 10%    | 9.8% |
| CHANGE*                                       | -    | -    | 99     | 43    | 186    | 77     | 273    | 111  |
| % CHANGE**                                    | -    | -    | 186.8% | 22.9% | 350.9% | 452.9% | 515%   | 653% |
| EMPLOYMENT                                    | 1980 |      | I      |       | II     |        | III    |      |
| TOTAL   | 49   |      | 116    |       | 151    |        | 170    |      |
| % OF COUNTY TOTAL                             | 5.2% |      | 9.3%   |       | 10.3%  |        | 10.8%  |      |
| CHANGE*                                       | -    |      | 67     |       | 102    |        | 121    |      |
| % CHANGE**                                    | -    |      | 136.7% |       | 208.2% |        | 246.9% |      |

1980 BASE FIGURES WERE TAKEN FROM 1980 CENSUS DATA.

\* CHANGE IS DETERMINED BY SCENARIO - 1980 .

\*\* % CHANGE IS DETERMINED BY SCENARIO - 1980

1980

I-B-5



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